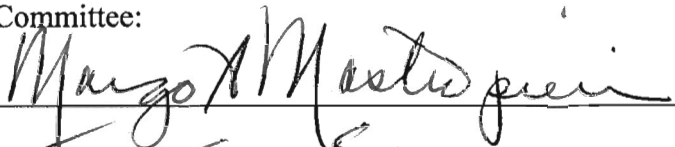CURRICULUM ENHANCEMENTS IN INCLUSIVE SOCIAL STUDIES
CLASSROOMS: EFFECTS ON STUDENTS WITH AND WITHOUT DISABILITIES

by

Lisa R. Marshak
A Dissertation
Submitted to the
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of
George Mason University
in Partial Fulfillment of
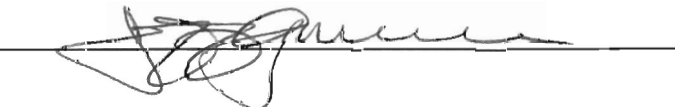The Requirements for the Degree
of
Doctor of Philosophy
Education

Committee:

_____ Chair

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and Human Development

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George Mason University
Fairfax, VA

Curriculum Enhancements in Inclusive Social Studies Classrooms:
Effects on Students with and without Disabilities

A dissertation submitted in partial fulfillment of the degree of Doctor of Philosophy in Education at George Mason University.

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Dedication

This dissertation is dedicated to my parents, who have supported me in every endeavor, and without whom I would not have been able to complete this project.

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Abstract

CURRICULUM ENHANCEMENTS IN INCLUSIVE SOCIAL STUDIES
CLASSROOMS: EFFECTS ON STUDENTS WITH AND WITHOUT DISABILITIES

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George Mason University, 2008

Dissertation Director: Dr. Margo Mastropieri

The purpose of this study was to obtain evidence of potential efficacy of supplementary

social studies materials providing differentiated curriculum enhancements for students

with and without disabilities in seventh grade social studies classrooms. Eight inclusive

seventh grade social studies classes were randomly assigned to either the curriculum

enhancement or traditional instruction conditions. Differentiated curriculum

enhancements included peer mediation using materials containing embedded mnemonic

strategies, which could be used when necessary to provide strategic information and

supplemental practice with important content, and necessary levels of support for

students with disabilities. The curriculum enhancements were relevant to the 7th grade

social studies end-of-year Standards of Learning (SOL) Assessment. Participants

included 186 seventh grade students, including 42 students with disabilities, and 16

students in the English Speakers of Other Language program. Three general education

teachers and two special education teachers participated in this study. Students received

instruction over three units for approximately10 weeks and were pre and post tested on all content covered. Overall findings revealed, that students in the curriculum enhancement condition statistically outperformed students in the comparison condition on content learned and that students with disabilities in the treatment condition statistically outperformed students with disabilities in the comparison condition. Moreover, it appeared the embedded mnemonic strategic items may have facilitated recall of additional content in the unit. Students and teachers reported enjoying the use of the peer mediated curriculum enhancement materials. Findings are discussed with respect to future research and practice.

1. Introduction

Since the beginning of the twentieth century, social studies curricula goals have changed rapidly. Initially, the goal of a social studies curriculum was to provide millions of immigrants, opportunities to learn about America's democratic traditions and values and prepare them to be valuable American citizens (Carnine and Bean, 1994). However, after immigration to America slowed and World Wars I and II ended, educators rejected the "life adjustment goals" (Carnine and Bean, 1994) and focused on inductive teaching, discovery learning, and content from other disciplines like sociology and political science (Carnine and Bean, 1994). During the political strife of the 1960s and 1970s, social studies curricula changed focus again to that of, "personal development and citizen education accomplished through class discussion and projects concerned with values conflict and moral dilemmas, social and political issues" (Brophy, 1990). Then, with conservative movement of the 1980s, social studies was criticized for paying too much attention to values conflict and social and political issues and changed focus towards the basics of history and geography (Carnine and Bean, 1994).

In 1992, The National Council for the Social Studies (NCSS) developed a purpose for social studies. It reverted back to the purpose of social studies in 1900 for immigrants, "Social studies programs have as a major purpose the promotion of civic competence

which is the knowledge, skills, and attitudes required of students to be able to assume 'the office of citizen' in our democratic republic (National Council for, 1992). In order to meet these standards, NCSS states that educators must make learning meaningful, integrative, value based, challenging, and active (National Council for, 1992). Many textbooks used in college level social studies methods courses agree that teachers must use a variety of methods to capture student interest (Thornton, 2005; Zevin, 1992; Kinder, Bursuck, and Epstein, 1992).

However, with the passing of the No Child Left Behind Act on January 8, 2002, school systems have been exposed to a new level of accountability for improving the achievement scores for all of its students. Schools measure performance by whether students meet targets including, "academic achievement, participation in assessments, graduation rates for high schools, and for at least one other indicator for elementary and middle school" (Jewell, n. d.). Schools then report scores for each target by delineating student performance by ethnic and racial groups, economically disadvantaged, students with disabilities, and students with limited English proficiency (Jewell, n. d.). Each year, schools must report their Adequate Yearly Progress (AYP) towards the minimum level of proficiency in reading/language arts and math for each group of students (Adequate Yearly, 2006). Even though performance in social studies and science are not included in these reports to the federal government, most states still require students to pass standardized tests in these subjects. Strategies teachers tend to rely heavily on textbooks and lack the necessary active participation NCSS recommends. Therefore, teachers need active strategies to help students pass the end of course tests in all subjects.

Often, schools do not pass because of the performance of students including students that are members of ethnic and racial minorities, economically disadvantaged, students with special needs, and students with limited English. One of the most common groups whose academic achievement often prevents schools from meeting targets is that of students with disabilities. The 1997 amendments to the Individuals with Disabilities Act (IDEA) mandated that all states must include students receiving special education services in their accountability programs (Fuchs and Fuchs, 2001). Historically, students with disabilities do not perform as well on the standardized tests states used to measure academic performance.

Students with learning disabilities possess a number of characteristics that affect their learning and performance on high-stakes tests (Fuchs and Fuchs, 2001). These children demonstrate significant problems reading and writing along with memory, cognition, and meta-cognition (Hallahan and Kauffman, 2006). Consequently, students with learning disabilities are less efficient at strategy usage and tend to have poorer self-regulation in terms of planning, monitoring, and revising during learning or problem solving (Kibby, Marks, Morgan, and Long, 2004). Many also experience difficulty organizing thinking, drawing conclusions, and lack the effective strategies for problem solving and processing material (Mastropieri and Scruggs, 2007; Meltzer, 1991).

Schools are scrambling to find ways to remain accountable to the federal government's standards for all students while simultaneously providing an individualized education for all of their students with disabilities. Therefore, students need to learn how to perform better on these high-stakes content-rich tests. However, many special

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education teachers focus their efforts on helping students pass their English and math tests to help their school achieve AYP while neglecting social studies. Another reason for the neglect of social studies is the demand for of inclusion and providing meaningful access for students with disabilities to the general education curriculum (De La Paz and MacArthur, 2003). Many special education teachers are often unfamiliar with the social studies curriculums, teaching strategies, and materials (Patton, Polloway, and Cronin, 1987) and therefore struggle to teach it effectively. Finally, many special education teachers neglect social studies because content knowledge is not part of a student's I.E.P (Patton, Polloway, and Cronin, 1987). I.E.P goals stress reading, writing, and math skills not content knowledge.

Students with disabilities have legally been provided a right to educational services in the least restrictive environment ever since the passing of the Education for all Handicapped Children Act in 1975 and the five consecutive reauthorizations in 1983, 1986, 1990, 1997, and 2004. The least restrictive environment is different for each student. Therefore, educators must look at a continuum of services to find the most appropriate placement for each child. While each state and local education agency offers different programs, there are approximately seven placements on a spectrum of services an IEP team can choose from when designing the least restrictive environment. The placements from least restrictive to most include: (1) General education classroom; (2) general education classroom with consultation; (3) general education classroom with instruction, co-teaching, or other services including resource room support; (4) full-time

special education classroom; (5) special or separate school; (6) residential school; and (7) homebound or hospital (Heward, 2006; Mastropieri and Scruggs, 2007).

Initially if the least restrictive environment was determined to be a general education classroom students with special needs were said to be "mainstreamed." This placement was thought to be something a special education student could earn if they displayed the appropriate skills (Mastropieri and Scruggs, 2007). The term used today is, "inclusion." An inclusion class is defined as a class with special education and general education students where in most cases, the instruction is primarily the responsibility of the general education teacher (Mastropieri and Scruggs, 2007). Students with disabilities may receive additional support from a paraprofessional or special education teacher within the general education room or in a resource room.

Most general education teachers have little or no training for teaching students with special needs. Because of the pressure to perform well on content driven high stakes tests, many general education science and social studies teachers are relying on textbooks as their main source of information (Myers and Savage, 2005). Many students with disabilities have some type of reading disability making classroom instruction difficult (Passe and Beattie, 1994). Consequently, teachers need strategies that can be used in the general and special education classrooms. The purpose of this study is to demonstrate the effectiveness of strategic mnemonic strategies embedded within a peer tutoring delivery system, in eight inclusive social studies classes. The following research questions will be addressed:

1. Are content knowledge overall post test scores for students receiving strategic mnemonic strategies embedded within a peer tutoring delivery system significantly different from students receiving traditional instruction?

2. Are content knowledge post scores for students with disabilities receiving strategic mnemonic strategies embedded within a peer tutoring delivery system significantly different from students with disabilities receiving traditional instruction?

3. Are content knowledge overall post test scores for students in team taught classes different from students in non team taught classes?

4. What are student and teacher attitudes towards strategic mnemonic strategies embedded within a peer tutoring delivery system?

<div align="center">Definitions of Terms</div>

Class Type

Classes with Team teaching or non Team Teaching

Classwide Peer Tutoring (CWPT)

A learning strategy that has the entire class of students working in pairs to accelerate student learning (Chun Chun and Winter, 1999).

Curriculum Framework

Specific content teachers must cover under the state Standards of Learning

Embedded Strategy Items

Historical content information taught using mnemonic cards paired with Classwide Peer Tutoring

ESOL

 English Speakers of Other Languages

General Education Teacher

A teacher certified to teach by the state either as a generalist or in a content area.

Inclusive Classrooms

Classrooms that have students with disabilities and regular education students in one

classroom.

Item Type

Questions taught either with mnemonic cards (embedded strategies) or traditional

methods (non embedded strategies)

Mnemonics

A memory an instructional strategy that connects new information with prior

knowledge by means of visual and acoustic clues (Mastropieri, Sweda, and Scruggs

2000).

No strategy provided items

Historical content information taught by traditional methods

Peer Tutoring Condition

Treatment condition that used the mnemonic cards

SOL (Standards of Learning)

The curriculum standards teachers must follow

Special Education Teacher

A teacher certified by the state to teach students with disabilities.

Student Type

Special Education or General Education students

Team Taught Classes

An inclusive classroom with students with and with out disabilities and taught

simultaneously by two teachers a general education teacher and a special education

teacher.

2. Literature Review

The current chapter describes intervention research in social studies that include students with disabilities. This description includes the search procedures followed by a presentation of topics including: (a) memorization of facts, (b) active participation, (c) auditory and visual comprehension, and (d) reading comprehension.

Literature Search Procedures

Data bases including PsychINFO, EBSCO Host, Education Resources Information Center (ERIC), Digital Dissertations, Elibrary, Social Sciences Index, and InfoTrac OneFile were searched. Keywords used in the searches included combinations of: *social studies*, *disabilities*, *learning disabilities*, *facts*, *strategies*, *methods*, *skills*, *special education*, *textbooks*, *reading comprehension*, *expository text*, *high-stakes testing*, *testing*, *assessment*, *accountability*, *mainstreaming*, and *inclusion*. In addition, an ancestry search of all obtained and reference lists was conducted. Finally, researchers in the field who were identified as having potentially relevant studies were also contacted.

Criteria for Inclusion

This review includes studies that met the following criteria: (1) the study was published in a peer-reviewed journal, (2) subjects in the studies were between

kindergarten and twelfth grade, and (3) the study's setting was in a social studies

classroom teaching social studies content knowledge.

Overall Characteristics

Compared with other disciplines, there is little research in social studies for

students with disabilities. Only 48 studies were located, published from 1980 to the

present including journal articles and dissertations. The studies located fell into two

categories. They examined either the effectiveness of a certain student tool or a style of

lesson delivery. The tools included mnemonics, graphic organizers, guided notes, white

paper informal assessment, a summarization tool, and use of a meta-cognitive strategy,

KWL, and a computer textbook. The styles of lesson delivery included CWPT, Teacher

Guided Practice, simulations, type of lectures, Jigsaw, project-based, cooperative

learning, and a talking computer. The studies reported in this review were further

organized by type of intervention as would be represented in a goal on an Individualized

Education Plan, (a) auditory and visual comprehension, (b) memorization of facts, (c)

active participation, and (d) reading comprehension.

Table 1 separates each study by disability type, grade, topics in social studies, and

type of intervention. The majority of studies included students with learning disabilities,

in middle school, studying American history, and improving auditory or visual

comprehension. The study samples included students with learning disabilities ($n = 40$),

emotional disabilities ($n = 5$), communication disorders ($n = 3$), mild handicaps (n = 2),

mental retardation ($n = 2$), Attention Deficit Disorder ($n = 1$), remedial/at risk students ($n = 2$), and seven studies did not report whether their samples included those with

disabilities. Forty-one percent of study settings were in middle school (grades 6-8), thirty-five percent were in high school (grades 9-12), 8% were in elementary schools (grades K-5), 8% were in middle and high schools, and 3% were in elementary and middle schools.

Table 1

Description of Literature

Disability Area	N[a]	
Learning disabilities	40	
At risk/Remedial	2	
Mildly handicapped	2	
Emotional disabilities	5	
Moderate retardation	2	
Attention deficit disorder	1	
Communication disorders	3	
Not reported	7	

Grade	*n*	%
Elementary School (K-5)	4	8
Middle School (6-8)	20	42
High School (9-12)	17	35
Elementary and Middle	3	6
Middle and High School	4	8

Topics in Social Studies	*n*	%
World History	8	17
Ancient History	2	4
American History	25	53
American Government	2	4
Invented Countries	1	2
Geography	2	4
Sociology, Psychology, and Geography	1	2
North America	4	8
Not Reported	2	4

Type of Intervention	*n*	%
Memorization of Facts	11	23
Active Participation	18	38
Reading Comprehension	18	38

[a]Studies may not add up to 47 as some served students with multiple disabilities and multiple topics in social studies.

American history was the most prevalent topic in social studies representing 52% of the studies. Other topics included world history (16%), North America (8%), Ancient history (4%), American government (4%), Geography, (4%), invented countries (2%), Sociology, Psychology and Geography (2%), and 6% of the studies did not report what topic in social studies they used for the intervention. The studies were organized by type of intervention. The most common intervention was auditory and verbal comprehension (65%), followed by memorization of facts (24%), and then active participation (10%).

Literature

The following sections describe social studies intervention study with special education and general education students. The studies are separated by memorization of facts, active participation, auditory and visual comprehension and reading comprehension.

Memorization of Facts

This section is a review and synthesis of previous research for student with disabilities using mnemonics to learn history content. A description of problems students with disabilities have with memory is followed by a definition of mnemonics and how they are used to facilitate learning,

Students with learning disabilities have difficulty with long-term memory, short-term memory and semantic memory (Mastropieri and Scruggs, 2007). They have difficulty recalling information that they just read or heard as well as remembering information when performing other cognitive tasks (Hallahan and Kauffman, 2006).

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Horton, Lovitt, and Slocum (1988) used a computer tutorial that involved a prompt, response request, response, and consequences to teach map facts while other students used a traditional atlas. Students worked at the computer for 30 minutes. Results indicated that the students mastered the material using the computer program.

One strategy that is used to help students memorize content information is mnemonics. Mnemonics is a memory enhancing instructional strategy that "connects new information with prior knowledge by means of visual and acoustic clues (Mastropieri, Sweda, and Scruggs 2000). They assist students with encoding the new content information in order to make retrieval easier (Mastropieri and Scruggs, 1998). Many methods of using mnemonics exist in the research including the keyword method, keyword/pegword method, and the reconstructive elaboration method. The following sections describe the research in social studies with students with disabilities using these three mnemonic methods.

Keyword Method

Students use the keyword method when they are required to learn new vocabulary, facts, or concepts (Scruggs and Mastropieri, 2000). A new vocabulary word is analyzed and assigned a similar, more easily remembered word. For example, for the name Rockefeller, the word "rock" would be used. This new key word would be linked to an interactive picture that shows the keyword and definition or concept relating to one another (Scruggs and Mastropieri, 2000). Rockefeller was a captain if industry for the oil business. An interactive picture may include a rock with oil poured over it.

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Of the research in social studies classrooms with special needs students, four studies employed the keyword method. Mastropieri (1994) successfully students 20 state names and their corresponding capital. The researchers created a card with a key word for the state and an interactive picture. Students scored an average 94% correct on a multiple choice test. Mastropieri, Sweda, and Scruggs (2000) taught facts associated with the settlement of the Chesapeake Bay. The teacher created illustrations to accompany a short reading. For example, to help students learn the definition of a "charter," the teacher drew a stick figure reading rules for a country on chart paper. The students with special needs average 75% correct on mnemonically taught items while only 36.7% on non-mnemonic content. Scruggs, Mastropieri, Brigham, and Sullivan (1992) taught eighteenth century war battles using a keyword and corresponding picture for each battle. When compared with the control condition that used only descriptive or decorative pictures students in the mnemonic condition outperformed those of the students in the control condition.

Fontana, Scruggs, and Mastropieri (2007) taught facts associated with world history. Teachers taught students using two methods, mnemonics and traditional instruction. When using mnemonics, the teacher placed transparencies of the cards on the overhead and taught five new words to students with a keyword and matching interactive picture. Results indicated that students scored higher on multiple choice tests on content learned mnemonically than on content learned through direct instruction.

Keyword/Pegword Method

Pegwords are words create to substitute for numbers and are used to remember sequential or numbered information (Scruggs and Mastropieri, 2000.) Scruggs and

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Mastropieri (2000) have used common pegwords such as one is bun, two is shoe, three is tree, etc. For example, since George Washington was president one. . . . The keyword for Washington is washing and the pegword for one is bun (Mastropieri and Weldon, 1997 p. 14). Students could be shown a picture of George Washington washing buns.

Only one study could be found in social studies using the keyword/pegword method. Mastropieri, Scruggs, and Weldon (1997) taught the order of the first 16 U.S. presidents Students were given a keyword for the president and a pegword for the number of the president as states above. On weekly tests, students scored 68.8% when using mnemonics and 32.0% when under the traditional treatment. On the delayed posttest, students scores of mnemonically taught material were 70.4% correct for name recall and 60.3% for number recall. In the traditional condition, students scored 23.9% correct for name recall and 31.1% for number recall.

Reconstructive Elaboration

Reconstructive elaborations come in different forms including, (a) acoustic, (b) symbolic, (c) mimetic, and (d) list learning. Acoustic reconstructions help students learn content information such as names of people, places, events, and unfamiliar vocabulary words (Mastropieri and Scruggs, 1989). A vocabulary word is changed to something that sounds similar and familiar. Then an interactive picture is used to make connections to name, place, or event. Symbolic reconstructions are used when some of the information is familiar to students. Therefore, a vocabulary word would be represented symbolically and then matched with a corresponding interactive picture (Mastropieri and Scruggs, 1989). Mimetic reconstructions are also used for familiar information. These pictures

tend to just illustrate a concept without a key word. List Learning involves using letters or acronyms to help remember information. The acronym is matched with an interactive picture to help students remember the information.

Reconstructive elaborations have been successfully used with mildly handicapped students to teach information from a textbook. Mastropieri and Scruggs (1989) used mnemonics as a supplement to their textbook readings. Students were presented with a section of a text as well as a picture with an accompanying script identifying the details and relationship the picture has with the test.

Brigham, Scruggs and Mastropieri (1995) taught the battles of the American Revolution using three conditions: elaborative, mnemonic, and control. In the elaborative condition, students were given battle names, location, corresponding keyword for each feature as well as a verbal elaboration that the other conditions did not receive. Overall, the recall of battle locations was significantly greater than associated information in all conditions. Both the elaborative and mnemonic conditions resulted in equal recall of location but the elaborative condition resulted in greater recall for associated information. Both the mnemonic and non-mnemonic conditions failed to recall associated information.

Mastropieri and Scruggs (1988) used the keyword method with different types of elaborations: mimetic, symbolic and acoustic. The students scored an average of 63.9 % using when taught with mnemonic strategies and 53.7% when taught with traditional strategies. Across individual textbook chapters, students recalled an average of 75.6% of the information they were taught mnemonically and 44.0% of the information they were taught using traditional instruction.

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Scruggs and Mastropieri (1989b) taught American history using acoustic elaborations. Students were presented with cards that contained a vocabulary word such as Zimmerman, a keyword such as swimmer, and a picture such as a swimmer swimming while carrying a note for Mexico (Scruggs and Mastropieri, 1989b). Results indicated that on average, students scored 64% on the multiple choice tests in the mnemonic condition and only an average of 46.8% in the traditional condition. Overall class grades were also higher when students learned in the mnemonic condition.

Diana and Webb (1997) did not use interactive pictures as in the above studies, but rather used descriptive pictures. In the study, the teacher taught 258 eighth grade students ancient Greek history using class notes and pictures of spears, soldiers, and shields. These pictures were not interactive, just decorative. Results indicated that the recall of historical information was higher for students who had access to the decorative pictures; however the effects disappeared after two weeks.

Summary

Research presented here demonstrates how effective mnemonics and classwide peer tutoring can be for learning history content. Students in different grades with different types of disabilities appeared to benefit when remembering content information with a keyword, pegword, or elaboration. Most importantly, the corresponding picture needed to be interactive. It is important to note that a picture is not enough to help students. Results from the Diana and Webb (1997) study demonstrated that the effects only using decorative pictures rather than interactive pictures may allow recall to disappear dissipate after a short period of time.

Active Participation

The skill deficits many learning disabled students possess make it difficult to succeed in many mainstream classes (Deshler and Schumaker, 2006). Many students with disabilities have difficulty with attention due to attention deficit disorder, attention deficit hyperactivity disorder or behavioral and emotional disorders. When the work is too hard and when a child has difficulty with attention, boredom and failure (Carpenter and McKee-Higgins, 1996) may result. The child becomes an inactive (Hallahan and Kauffman, 2006) and passive participants in the classroom. The following five studies demonstrate how engaging students with disabilities in active learning helps students learn social studies content material.

Classwide Peer Tutoring

Classwide peer tutoring is a learning strategy that has the entire class of students working in pairs to accelerate student learning (Chun Chun and Winter, 1999). This strategy allows more active participation within the classroom and, "to provide pacing, feedback, immediate error correction, high mastery levels, and content coverage" (Greenwood, Delquadri, and Hall, 1989, p. 3). There is extensive research on the effectiveness of Classwide Peer Tutoring with students with disabilities, (see Greenwood, Meheady, and Carta, 1991; Mathes and Fuchs, 1993; and Kamps, Kravits, Rauch, Kamps, and Chung, 2000), however, only one study could be found using classwide peer tutoring to memorize facts in a social studies setting. Two other studies were located that used Classwide Peer Tutoring to help students improve reading comprehension. One is

described in the reading comprehension section under summarization skills and the other in reading comprehension under organizers.

Maheady, Sacca, and Harper (1988) taught the American and French Revolutions, and World War I. After the teacher taught traditionally, students were presented with practice sheets/study guides. Students formed dyads and dictated the study guide questions to his/her partner. Results indicated a dramatic increase in weekly test scores. The gains for the entire group ranged from 19-27%. The gains of the students with disabilities were 23.15% and their weekly test scores often exceeded the scores of the general education students. After two teachers withdrew treatment, scores dropped between 20 and 22% and treatment was begun again.

Active Participation and Goal Setting

Swanson (1998) used active participation in the form of an informal assessment with goal setting. Students were assigned to one of three treatments: response cards, response cards with self-monitoring, and response cards plus self-monitoring and goal setting. Students would be given a problem and then solve it on a piece of white paper in a plastic sheet. Results indicated that for students in the first treatment quiz scores for LD students increase from 73 to 93%. For students with low reading ability, their scores grew 217% on the first set of daily quizzes and 83% on the second set. On the weekly quizzes, LD student scores increase first by 25% and then 119%. Low reading ability student scores increased 258% and then 58%. The second treatment resulted in increased test scores for all participants except for one student. This study demonstrates that the use of

having students respond numerous times in class as well as set and evaluate goals dramatically increased their content level knowledge.

Using Primary Resources and a Mock Trial

Another form of active participation in social studies research is class simulations. De La Paz (2005) taught westward expansion and the historical bias associated with its history by having students participate in a mock trail of the Cayuse Indians. They learned a historical reasoning strategy to understand bias in primary documents. Each student's essay was assessed based on length, persuasiveness, arguments, and accuracy. The experimental students all scored higher in every category when compared with control students. This study demonstrated that when students were actively engaged in the activity, their writing improved.

Multi-media Projects

In the first study, Okolo and Ferretti (1996) taught the Revolutionary War by assigning students a topic and instructed them that they were to become the "expert" for the group. The goal was to create a multi-media project of each participant's work. The experimental condition had access to word processing and a scanner for pictures. The control condition had access to a word processing program. Both groups made substantial knowledge gains from pretest to posttest. Each group wrote about the same number of words, although there was considerably more variance in the WP group. Students in both conditions increased their knowledge and improved on the pretest. There were no differences, however, when comparing conditions in terms of content knowledge, motivation to learn the topic, or the length of written products.

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Ferretti, MacArthur, and Okolo (2001) taught westward expansion and about bias and trustworthiness in historical documents. Students designed a multi-media project describing the reasons why a certain emigrant group moved west. Both the students with disabilities and general education students improved knowledge about westward expansion and the process of historical inquiry. In both of these studies, students were actively engaged. In designing projects, these students were able to learn the history content.

Summary

The studies above, all had significant student improvement when the student was actively engaged. Students that have difficulty paying sustained attention due to attention deficit disorder, attention deficit hyperactivity disorder or behavioral and emotional disorders need classroom activities that will allow them to stay actively engaged for a sustain period of time. The research indicates that when students used classwide peer tutoring, created multi-media projects and participate in simulations, their performance in social studies increases.

Auditory and Visual Comprehension

Many students with learning disabilities have difficulty with visual and auditory processing (Hallahan and Kauffman, 2006; Swanson, 1987). A student may have a visual processing disorder if they have difficulty making sense of information accessed visually. Students may have difficulty with visual discrimination, visual sequencing, visual memory, visual motor processing, visual closure, or spatial relationships. Students may have an auditory processing disorder if they have difficulty making sense of information

accessed auditorilly. Students may have difficulty with auditory discrimination, auditory memory, or auditory sequencing (National Center for Learning Disabilities, 1999/2008). These students may have difficulty organizing and solving math problems, Finding and retaining important information in reading assignments or tests, writing coherent, well-organized essays, copying from board or books, writing neatly and quickly, and reading with speed and precision. Students may also have trouble identifying information from pictures, charts, graphs, maps, etc., organizing information from different sources into one cohesive document, finding specific information on a printed page National Center for Learning Disabilities, 1999/2008).These deficits may hamper a student's ability to successfully perform activities in the classroom.

The following studies address different aspects of processing information . The first study assesses uses of video to teach students without reading material. The second set of studies use organizers to help students process and understand content information. The third set of studies use various interventions to help students with reading comprehension while the fourth set of studies uses teacher-guided practice.

Video

Ward-Lonergan, Liles, and Anderson (1988) taught students information about fictitious countries. In treatment one, students viewed a video about a fictitious country with a causal discourse structure. In the second treatment, 25 minutes later, students listened to a lecture on the same fictitious country with a comparison discourse structure. Each lecture stressed different aspects of the country. After viewing the comparison

lecture, all students were able to answer questions that are more literal and after the causation lecture, students were able to answer more inferential questions.

Note-taking: Organizers

The following studies examine the effects of student-created notes vs. teacher-created or led notes. Students with disabilities often have difficulty distinguishing between important and unimportant information. Therefore, their notes are ineffective when preparing for exams. Many educators use graphic organizers to help students take notes and understand historical content. These graphic organizers can take many shapes and purposes. The following organizers help students organize thoughts, take notes, and review for tests. Some of the studies use multi-media organizers while some use paper and pencil.

Bulgren, Schumaker, and Deshler (1988) taught students using an organizer to analyze a concept using always characteristics, sometimes characteristics, and never characteristics (Bulgren and Deshler, 1988). Students also analyzed the concept on the organizer for examples and non-examples of the concept. Students filled in their copy of the advanced organizer while the teacher did the same on the overhead. Students were assessed on concept acquisition tests, note taking, and regular chapter tests. Results indicated that during the concept acquisition tests, the performance of the experimental students was lowest (47%) during baseline and highest after concept training was combined with concept review (82%). After the concept training and concept review, all students improved again from baseline (LD = 59%, NLD = 72%) and after treatment (LD

= 71% and NLD = 87%). In note taking, the scores improved from baseline (LD = 47%, NLD = 51%) and after treatment (LD = 77%, and NLD = 79%).

Hamilton, Siebert, Gardner, and Talbert-Johnson, (2000) taught students with each session included a ten minute quiz on previous day's lecture, feedback on quizzes, 15 minutes of lecture on new information using at baseline students own notes (ON) or during the intervention, guided notes (GD), 5 minute review period, and 15 minute study period by for the next day's quiz. At baseline, students took notes on important concepts from the lecture. During the intervention, students took notes using a notes page with partial notes and blanks that students were to complete during the lecture. The mean score for accurately recorded concepts on notes at baseline was 35.7% while the mean scores using guided notes was 84.6%. The next day's quiz scores went from an F at baseline to a C during the intervention.

Active Participation and Organizers

The following studies use both active participation and organizers to help students learn content information. Typically, students with disabilities tend to gain little information from lectures. They either have difficulty processing the information or have difficulty distinguishing between important and unimportant information. Sweeny, Ehrhardt, Gardner, Jones, Greenfield, et al., (1999) examined whether 13 students in a remedial summer school course would achieve higher scores if they took their own notes versus the effects of taking notes with teacher. In the experimental condition, students listened to a short lecture and then the teacher said, "Pencils up!" and read the exact sentences off the transparency on the overhead that students were told to write. By

announcing pencils up, she informed students that the following information was important and therefore they wrote it down. Students made substantial improvements from baseline (taking their own notes) and treatment (copying the teacher's notes) in quiz performance and overall satisfaction with taking notes.

An example of a study that used a teacher made organizer as well as active participation was Box and Little (2004). Using a Jigsaw approach students were split into four groups and each member had a specific task assigned with an organizer to help them learn the content. After they completed their task, they returned to their original group and taught their peers the material they have learned. Results indicated that the experimental condition increased their scores of self-concept and quiz grades. While the quiz grades of the control class also increased, their self-concept scores decreased.

Boon (2005) also used an organizer during a class lecture/discussion. Students completed an organizer while the teacher presented new material. Periodically, the teacher would stop and would discuss the organizer making comparisons and ensuring all students had the correct information. Students then typed their organizers using the Inspiration software. Students printed an outline version of their organizer and studied it for 10 minutes. The next day students presented their organizers and after a class discussion, took a post test. Results indicate that the mean of the pretest scores was 0.40% (with scores ranging from 0-3%), the mean of the post test scores was a 20.11% (with scores ranging from 11-28%), and the mean of the delayed post test scores was a 19.10% (with scores ranging from 12-30%). Giving students an organizer to complete during the lecture helped students learn the content.

Two other examples of using an organizer with active participation are Boon, Burker, Foree, and Spencer, (2005 and 2006). In both studies, the first being a pilot, students completed a paper and pencil web on their desks while the teacher completed one on the overhead. They then went to a computer lab and typed their web using Inspiration software. Students studied the computerized web in pairs. The teacher asked various questions about the material and then gave students a post test. In the control condition, the students used their textbooks along with teacher presentation, teacher questioning, oral reading, silent reading, cooperative learning activities, video presentations, and a guided reading worksheet (Boon et al., 2006). After the teacher reviewed with the students, they were allowed 10 minutes to study using any materials. Students were then administered a post test. The scores of the experimental group went from a mean of 11% (with scores ranging from 0-45%) to a mean of 52% (with scores ranging from 23-81%). The scores of the control group went from a mean of 13% (with scores ranging from 0-45%) to a mean of 27% (with scores ranging from 2-55%).

Hudson (1996) instructed a teacher to review the previous day's lesson verbally while providing positive feedback. In the control condition, students silently reviewed their previous day's notes and then put them away. Students in the experimental condition earned a mean score if 14.1 on the unit test and students in the control condition earned a mean score of 9.3 on the unit test. On the maintenance test, Students received a mean score of 11.4 while the students in the control condition received a 5.6.

Hudson (1997) had the teacher break up lectures into segments with oral questions about the preceding segment. Their goal was to have as many students respond

as possible. In the control condition, the instruction was broken up into segments; however, there was no discussion. Students read silently information in their notes from the preceding day. Results indicated that students in the treatment condition outperformed students in the control condition on both unit and maintenance measures. Students in the treatment condition scored a mean score of 14.3 on the unit test and a 14 on the maintenance test while the students in the control condition scored a mean score of 10.7 on the unit test and a 9.64 on the maintenance test.

Summary

Many students with learning disabilities have auditory and visual processing deficits need activities that will help them learn content information. The research indicates that when information is presented in multiple formats, students with disabilities have an easier time processing content. These formats could be video, lecture, organizers, or alternative texts, These strategies will allow students to participate in class discussions by processing material more easily.

Reading Comprehension

Results of the 2005 National Assessment of Educational Progress indicate 27% of high school seniors are reading below the basic level (Grigg et al., 2007). This statistic is a problem for many social studies teacher as many rely on textbooks to relay content information to their students. Social studies textbooks contain some of the most difficult material students use in school (Harness, Hollenbeck, and Crawford, 1994). Many textbooks are heavily loaded with vocabulary words, cover a tremendous amount of content, lack coherence, and seem uninteresting to many students (De La Paz, 2005).

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This also presents a problem for students with learning disabilities. These students often have difficulty with the process of abstracting important information from the text and often have no idea what is important (Horton, Lovitt, and Bergerud, 1990; De La Paz, 2005). Compounding this problem, is the difficulty learning disabled students have with note taking and assimilating written information (Passe and Beattie, 1994). The following studies are interventions to help students with reading comprehension.

Summarization Skills

Wong, Wong, Perry and Sawatsky, (1986) completed two studies. The first study had three phases in which students were taught how to identify a main idea and to summarize paragraphs. Students then progressed to learning a self-questioning summarization strategy and then to using self-questioning prompts. Results indicated that this strategy increased the students' summarization scores and recall scores. In the second study, Wong, Wong, and Sawatsky, (1986) replicated their previous study using three participants with one student being learning disabled. Results indicated that all three students increased their summarization skills; however, not all increased their recall scores.

Bakken, Mastropieri, and Scruggs, (1997) taught reading comprehension by randomly assigned to one of three conditions: text-structure condition, paragraph restatement condition, and the traditional instruction condition. In the text-structure, condition students were taught how to identify the main idea, list supporting facts, and study using this strategy. In the paragraph restatement condition, students read a passage and restated the passage in their own words. In the traditional instruction condition,

students read the passage and answer questions. Results indicated that students in the text-structure condition outperformed students in the paragraph restatement condition and the traditional condition.

Lederer (2000) taught students to question, summarize, and clarify information while reading a text passage. They read the passage, developed and answered three questions about the passage, and then listed the subheadings and corresponding facts. Finally, students summarized the passage. Students in the experimental condition were split into groups of four or five and completed the assignment together. Results indicated that the experimental group performed in significantly higher on reading comprehension measures.

Spencer (2003) taught students using a traditional teaching approach that included teacher made guided notes, worksheets, round-robin reading, teacher-led discussions, and videos. In the other condition, Classwide Peer Tutoring (CWPT) was used. Students read a paragraph aloud and together with their partner summarized the paragraph on given sheet. Afterwards, students used fact cards to quiz each other on the most important facts of chapter. Results indicated that students in the peer tutoring with summarization condition outperformed their peers in the traditional teaching condition on weekly quizzes and multiple choice tests. These students also spent more time on task and engaged in the activity.

Organizers

Bos, Anders, Filip, and Jaffe, (1989) used a teacher made organizer called a Semantic Feature Analysis Chart to assess the reading comprehension of a 1500 word

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passage. The chart helped activate prior knowledge to define important ideas and related

vocabulary. Concepts and vocabulary were categorized as subordinate, coordinate, or

subordinate depending upon semantic relationships among the concepts and level of

importance (Bos et al., 1989, p. 385). Students then took a multiple choice test. The

students in the control condition used a dictionary to define vocabulary and the read the

same passage to correct their answers after which they took a test. Results indicated that

the students instructed with Semantic Feature Analysis performed significantly better on

vocabulary and conceptual items than students instructed with the dictionary method.

Horton and Lovitt (1989) also studied the effects of reading comprehension by

also using an organizer. After reading the passage, students completed an outline graphic

organizer with the teacher as he or she wrote on the overhead. The teacher elicited

answers from students and discussed the material as they completed the organizer. Once

completed, students then studied independently for 5 minutes and took a test. In the

control condition, students read and reread the passage and took any type of notes for 20

minutes. Then they were administered a test. The students with learning disabilities

earned a 68% in the experimental condition and a 49% in the control; the remedial

students earned an 85% in the experimental condition and a 68% in the control; and the

general education students earned a 93% in the experimental condition and a 76% in the

control.

Horton and Lovitt, (1989) replicated their study and then extended it by he study

guide had page numbers to answer locations in the text. Students also compared their

answers to those of the teachers before studying and taking the test. The students with

learning disabilities earned a 77% in the experimental condition and a 43% in the control; the remedial students earned an 81% in the experimental condition and a 53% in the control; and the general education students earned a 94% in the experimental condition and a 78% in the control. Across the two experiments, results indicate that the students with learning disabilities that used graphic organizers averaged 73% while the students with disabilities that used self-study averaged 46%. In addition, the students receiving remedial services that used graphic organizers averaged 83% while the study averaged 61%. The general education students that used graphic organizers averaged 91% while the students that used self-study averaged 75%.

Horton, Lovitt, Givens, and Nelson, (1989) taught reading comprehension with a computer. In the experimental condition, students received all materials via a computer screen. The progressed through the reading, study guide, and test taking segments at his or her own pace. Students read for 15 minutes and answered the study guide questions twice before taking the assessment; then the teacher gave them a paper copy of the same assessment. In the control condition, students read and reread the passage and took any type of notes for 15 minutes. Then they were administered a test. The students with learning disabilities earned a 76% in the experimental condition and a 42% in the control; and the remedial students earned a 77% in the experimental condition and a 58% in the control.

Horton, Lovitt, and Bergerud, (1990) completed three studies assessing student reading comprehension. In the fist study, the experimental group marked the beginning and end of passage, read, and reread for the passage for 15 minutes. Students completed

an outline graphic organizer simultaneously with the teacher on the overhead. The teacher elicited answers from students and discussed the material as they completed the organizer. Students then studied for five minutes independently and took a test. In the control condition, students read and reread the passage and took any type of notes for 20 minutes, then they were administered a test. In the experimental or teacher directed condition, the children with learning disabilities averaged 73% and in the control or self-study condition 30%. In the experimental condition, remedial children averaged 80% and in the control condition 39%. In the experimental condition, the general education children averaged 84% and in the control condition 64%.

In the second study, Horton, Lovitt, and Bergerud, (1990) kept both conditions exactly the same; however, in the experimental group a cover sheet with the page and paragraph number where each answer could be found was attached to the student graphic organizer. Students worked independently while the teacher circulated around the room and then went over the answers. The students with learning disabilities earned a 71% in the experimental condition and a 19% in the control; the remedial students earned a 68% in the experimental condition and a 44% in the control; and the general education students earned a 90% in the experimental condition and a 44% in the control.

In the third study, Horton, Lovitt, and Bergerud, (1990) kept both conditions exactly the same; however, the experimental group had an additional word bank for their organizer. Results indicated that the children with learning disabilities scored a mean of 10 in the experimental or word bank condition and a mean of one in the control or self-study condition. The middle school students scored a mean of 10.71 with the

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experimental condition and a mean of 7.78 in the control condition. Overall, across the

three experiments, results indicated that the students with learning disabilities averaged

70% with the graphic organizers and 20% with self-study. The remedial students average

74% with the graphic organizers and 42% with self-study. The general education students

averaged 80% with the graphic organizers and 56% with self-study.

Horton, Lovitt, and Christenson (1991) used three treatments of study guides

(multi-level and single level) containing different levels of referential cues: teacher

directed, dyadic, and independent to assess reading comprehension. Students read for 12

minutes, divided into three groups and completed multi-level study guides. They then

took the assessment. Results indicated that in the teacher directed treatment the raw

scores for factual information was 78% using the multi-level and 55% using the single-

level. In the dyadic treatment, the students scored 73% using the multi-level and 55%

using the single level. In the independent treatment, students scored 89% using the multi-

level and 83% using the single level.

Higgins, Boone, and Lovitt (1996) also used a computer to assess reading

comprehension. The researchers created Hypermedia study guides using the software

program *Guide*. Students viewed a card on the screen with a short passage. Some words

would be underlined or in bold type. The underlined words would be notes that the

student could click on and get further explanation. When the student clicked on the bold-

faced words, a synonym or definition would appear. Students could not go on to the next

card until they had answered the multiple-choice question correctly. If they answered it

wrong, the computer would highlight where the student could find the answer in the text.

Students were assigned to one of three treatments: lecture, lecture and hypermedia guide, or just the hypermedia guide. In the lecture condition, students listened and took notes. They were allowed to use these notes on the worksheet but not on test. In the lecture and hypermedia guide condition the students performed the same tasks as above; however, they handed in their notes and went to the hypermedia guide for as many times as they could for 15 minutes. In the hypermedia condition, students used the guides as many times as possible 30 minutes. Results indicated that students in lecture/hypermedia condition retained the most information, followed by the hypermedia condition and then lecture condition. The students with learning disabilities scored a mean of 81 in the lecture/hypermedia condition, a mean of 61 in the hypermedia condition, and a mean of 40 in the lecture condition. The remedial students scored a mean of 71 in the lecture/hypermedia condition, a mean of 71 in the hypermedia condition, and a mean of 57 in the lecture condition.

Mastropieri, Scruggs, Spencer, and Fontana, (2003) used guided notes and Classwide Peer Tutoring. Two classrooms were assigned to a guided notes condition or a tutoring condition. In the guided notes condition, the lesson began with a daily review, teacher presentation of new material, guided, and independent practice (Mastropieri et al., 2003, p. 56). Students then completed fill-in-the-blank notes independently, that corresponded to the reading. The teacher reviewed the notes and students were able to correct their answers. In the tutoring condition, the teacher presented the material exactly as they had done in the previous condition. Instead of the guided notes, however, students paired up and after reading a passage aloud to their partner, students summarized with

teacher provided prompts. The teacher then led a group discussion of the text passage and student answers. Results indicated that there was a statistically significant main effect on chapter tests and unit tests favoring the tutoring condition. Students in the tutoring condition were also able to better generate summaries than the guided notes condition.

Kinder and Bursuck, (1993), during baseline, had teachers instruct solely from the textbook and heavily depend on the memorization of facts and concepts. Students read from the assigned section of their textbook, wrote responses to four to seven short-answer questions and wrote definitions to text-identified vocabulary words. Next, students completed pages from the workbook that accompanied the textbook after which the test was administered. The intervention consisted of using an organizer for pre-skills instruction, problem-solution-effect analysis note taking, vocabulary note taking, timeline note taking, and reciprocal questioning. In class one, the percentage of correct answers increased from a baseline average of 44.7% to an intervention average of 78.0%. In class 2 the percentage increased from the baseline level of 56.8% to an intervention level of 81.8%. For Class 3, the percentage increased from the baseline level of 50.9% to an 85.5% after the intervention.

Alternative Texts

Research indicates that providing different types of texts improves the reading comprehension of students with disabilities. Beck, McKeown, Sinatra, and Loxterman (1991) revised texts passages to reflect a causal/explanatory design. Student comprehension levels were compared with students who used the tradition texts. After students read each section they summarized responded to open-ended questions. Results

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indicated that the students who read the revised texts answered more questions correctly. The mean score for the students using the revised text was 49.1 while the mean for the original text was 29.1.

Montali and Lewandowski, (1996) presented information visually (read silently), bimodally (highlighted and read by computer), and auditorilly (read by computer). Students participated in all three treatments when reading a passage on a computer. Following each treatment, students responded orally to a 10 question quiz on the computer. Results indicated that across all treatments, average readers answered more questions on the quizzes. However, the low readers answered more comprehension questions from bimodal presentation. Their performance did not differ between auditory presentation mode and the visual presentation mode. The bimodal presentation style brought the performance of the less skilled readers up to the level of the average readers when in the visual presentation mode.

Crawford and Carnine, (2000) used a conceptually organized textbook versus a topically organized textbook on a multiple choice and short answer essay test. Results indicated that on the multiple-choice test, students using the in the topically organized texts scored a mean of 9.30 on the pretest and a 12.84 on the posttest. Students using the conceptually organized textbook scored a mean of 8.6 on the pretest and a 14.30 on the post test. There was no statistically significant main effect for treatment on the essay portion of the test.

Twyman and Tindal, (2006) used a conceptually framed, computer-adapted text in one condition and the district adopted textbook. The computer-adapted text read the text

aloud while students could click on a difficult word to be read to them. Students could also click on four links: (a) an overview of the chapter; (b) a list of the concepts displayed in tabular or graphic organizer format; (c) simplified text; or (d) problem solving assessments used as discussion points during class, as well as written assessments (Twyman and Tindal, 2006). Even though there was no statistically significance between treatments on vocabulary and comprehension, results indicated the computer-adapted text was effective in improving domain vocabulary acquisition. Analyses also showed no statistical difference between the groups for comprehension. There was evidence to suggest that there was statistical significance on the extended response essay.

Strategy Instruction

Harmon, Katims, and Washington, (1999) taught the PEP Cognitive Strategy: person, event, place (Harmon and Washington, 1999). This strategy uses a student's background knowledge to generate questions to help their peers read specific passages. The teacher modeled meta-cognitive self-talk, note taking, and how to form questions. Students work in groups to create a reading road map to help another group read a selected passage. The road map consists of three major parts: (a) location signs called Road Construction Signs where students identify sections of text, (b) question cards called Info-Markers where students change their notes into questions, and (c) a section for Responses where students address questions (Harmon and Washington, 1999, p. 73). After students finish writing the road maps, they exchanged with another group and use to complete another passage. Students also evaluated each map using a critique sheet. Results indicated that on the pretest, students scored an average of 50%, while at posttest

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the average score was 81%. The students with learning disabilities average pretest score was 51%, while at posttest, their average score was 73%.

Cantrell, Fusaro, and Dougherty, (2000) required students to write in their journal after reading the assigned passage using a KWL method (Cantrell, 2000). Students completed the K: what they know about the topic based on the headings and subheadings; W: what they wanted to know about the topic and then read the passage. Students then completed the L: what they learned from the reading. Students in the control treatment read the assigned passage and then summarized what they read in their journals. Results indicated that the mean post test scores for students in the KWL experimental treatment was 93.10 and the mean post test scores for students in the control summary treatment was 83.42.

Summary

Students with disabilities need interventions to help them read to learn information. The majority of students with disabilities display some type of reading difficulty (Shaywitz, Morris, and Shaywitz 2008; Lyon, 1996). The research demonstrates that students with disabilities can read successfully if they actively manipulate the text. Summarization techniques, graphic organizers, alternative forms of texts and strategy instruction all proved to help students with disabilities better comprehend the text.

3. Method

This section describes the research design and methods implemented for this study. The following sections include descriptions of the research design, operational definitions, participants, materials, dependent measures, procedures, fidelity of treatment, and scoring data for analysis.

Research Design

A quasi-experimental design (see Table 2) was implemented in inclusive classrooms using mnemonic materials paired with classwide peer tutoring (CWPT). Classes were stratified by class status: team taught and general education and then were randomly assigned to either peer tutoring or traditional instruction condition. This intervention was evaluated using a two condition (peer tutoring vs. traditional instruction) by two types of students with and without disabilities. This study intends to answer the following research questions: (a) Are there differences between treatment groups on gain score in content knowledge? (b) Are content knowledge post scores for students with disabilities receiving strategic mnemonic strategies embedded within a peer tutoring delivery system significantly different from students with disabilities receiving traditional instruction? (c) Are content knowledge overall post test scores for students in team taught classes different from students in non team taught classes?

and (d) What are student and teacher attitudes towards strategic mnemonic strategies embedded within a peer tutoring delivery system? To answer these questions, four classrooms were assigned to the treatment condition and used mnemonics paired with Classwide Peer Tutoring. Four inclusive classrooms were assigned to the traditional instruction condition and used traditional teaching methods.

Table 2

Study Design

Students	Tutoring		Traditional Instruction	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Condition	Use of supplementary social studies materials, through mnemonics/CWPT		No use of supplementary social studies materials.	

Participants

This study was conducted in a suburban school district in a mid-Atlantic state. Students in eight, seventh grade inclusive social studies classrooms participated in this study.

This middle school was one of 238 schools, in the 13th largest school district, in the United States with a projected cost per student of $12,917. The total student population for this district was approximately 164,295 with 20,141 school-based staff positions. The student demographics were comprised of 10.8% African American, .3% American Indian, 17.4% Asian American, 16% Hispanic, 4.9% multi-racial, and 50.2% Caucasian students. Approximately 19.9% of students received free/reduced meals, 13.9% received ESOL services for limited English proficiency, and 14.6% received services for disabilities.

School

The school served approximately 1,250 students in seventh and eighth grades with 100 faculty members. The school's population was made up of Asian or Pacific Islander (27.26%), African American (10.46%), Hispanic (10.55%), and Caucasian (47.18%) students. Of the total population, 19.84% received ESOL services for limited English proficiency, 13.32% received services for disabilities (LD, ED, Autism, MR), and 16.18% received free/reduced meals. Female students made up 51.12% of the population while 48.88% of the students were male. The school's schedule was a modified block with a traditional 47 minute, eight period day on Mondays, Tuesdays, and Fridays. On Wednesdays, students had odd period classes for 90 minutes and Thursdays, students had even period classes for 90 minutes. The majority of students were assigned to one of four core academic teams consisting of an English, math, science, and social

studies teacher at each grade level; however, some students had classes with teachers on other teams.

Teachers

The five teachers that participated in the study included three general education teachers and two special education teachers. All of the teachers were Caucasian females with Master's Degrees. The first general education teacher was 47, had a Master's degree in Curriculum and Instruction and was in her 27th year of teaching. The second general education teacher was 29, had a Master's Degree in Education and was in her third year of teaching. The third general education teacher was 38, had a Master's Degree in Moderate Special Needs and was in her fifteenth year of teaching. The first special education teacher was 33, had a Master's degree in Special Education, and was in her eighth year of teaching. The second special education teacher was 36, had a Master's degree in Special Education, and was in her thirteenth year of teaching. Table 3 describes teacher characteristics.

Table 3

Teacher Characteristics

Teacher	1	2	3	4	5
Type of Educator	GE[a]	GE	GE	SE[b]	SE
# of years of teaching experience	15	3	27	7	13
Highest degree held	M.Ed[c]	M.Ed	M.Ed	M.Ed	M.Ed
Age	38	29	48	32	36
Race	Caucasian	Caucasian	Caucasian	Caucasian	Caucasian

[a]General Education Teacher
[b]Special Education Teacher
[c]Masters of Education Degree

Table 4 describes what type of classes each teacher taught and which condition these

classes were assigned.

Table 4

Classroom Characteristics

Condition	Class Type	Overall	SE[a]	GE[b]	ESOL[c]	ESOL and SE[d]
		n	*n*	*n*	*n*	*n*
Traditional	Team Taught	17	5	10	0	2
Traditional	Team Taught	22	10	11	0	1
Peer Tutoring	Team Taught	27	17	8	0	2
Traditional	non Team Taught	25	1	23	1	0
Peer Tutoring	non Team Taught	22	2	20	0	0
Traditional	non Team Taught	27	0	25	2	0
Peer Tutoring	Team Taught	22	9	11	2	0
Peer Tutoring	non Team Taught	24	2	16	6	0
Total		186	37	133	11	5

[a]Students receiving special education services
[b]Students in general education
[c]Students that are English Speakers of Other Languages
[d]Students that are English Speakers of Other Languages and qualify for special education services

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Students

Based on collected consent and assent forms, 186 students in eight inclusive classrooms from a suburban mid-Atlantic state participated in this study. Forty-two students with disabilities were included in this sample as well as 11 students in the English Speakers of Other Languages (ESOL) program and two students received services from both the special education program and the ESOL program. Forty-two students (22.6%) of the study's population qualified for special education services under federal, state, and district guidelines. Table 5 describes the student age, IQ, and academic measures for students with disabilities. One hundred forty-four students (77.4%) were identified as general education students. Among those students, 16 (8.6%) students were receiving services from the ESOL department, as English was not their first language. Of the total population, 101 students were male and 85 students were female. School data identified 89 (47.8%) students as Caucasian, 22 (11.8%) students as African American, 29 (15.6%) students as Hispanic, one (.5%) student as American Indian, 40 (21.5%) students as Asian, and five (2.7%) students as multi-racial. Table 6 describes student characteristics by treatment condition.

Table 5

Special Education Student Characteristics

	Tutoring Condition				Traditional Condition			
Variable	n[d]	%[e]	*M*	*SD*	n[d]	%[e]	*M*	*SD*
Age	23	100	153	5.62	19	100	152.26	4.382
Full Scale IQ[a]	17	74	96.06	11.37	10	53	103.7	12.11
Stanford Reading Inventory[f]								
Students with Disabilities	23	100	819.39	158.63	19	100	848.16	303.289
WCJ-Mathematics[b]								
Students with Disabilities	13	57	94.69	11.89	10	53	100.3	11.324
WCJ-Reading[b]								
Students with Disabilities	14	61	90	12.58	10	53	98.4	15.042
WCJ-Writing[b]								
Students with Disabilities	14	61	97.71	31.15	10	53	98.8	13.588

[a]IQ scores were only available for students with disabilities
[b]WJ-III standard scores were only available for students with disabilities
[c]ITBS National Percentile Ranks reported
[d]Number of students for which scores were available
[e]Percentage of students with disabilities
[e]Stanford

Table 6

Total Sample Student Characteristics

	Condition			
	Peer Tutoring		Traditional	
	n	%[a]	*n*	%[b]
Type of Student				
General Education	64	67	69	76
Learning Disabled	13	14	5	5
Other Health Impaired	2	2	7	8
Autistic	4	4	1	1
Speech and Language Impairment	1	1	0	0
On a 504 plan	3	3	3	3
Emotionally Disabled	0	0	4	4
English Speaker of Other Languages	8	8	3	3
Physical Disability	0	0	1	1
English Speaker of Other Languages and Learning Disabled	2	2	3	3
Total Sample Size	95		91	
Ethnicity				
White	49	52	40	44
Black	11	12	11	12
Hispanic	15	16	29	32
Asian	18	19	22	24
Multiracial	2	2	3	3
American Indian	0	0	1	1
Gender				
Male	47	49	54	59
Female	48	51	37	41

[a]Percentage of students in the Tutoring Condition
[b]Percentage of students in the Traditional Condition

The mean age of the students with disabilities was 153.05 months (*SD* = 5.089). IQ

scores were only available for 27 of the 42 students in special education and the average

IQ was 98.89 (*SD* = 12.02). The Woodcock-Johnson Reading score was available for 24

students and the mean score was 93.50 (*SD* = 14.) The Woodcock-Johnson Writing score

was available for 24 students and the mean score was 98.17 (*SD* = 24.92.) The Woodcock

Johnson Math score was available for 23 students and the mean score was 97.13 (*SD* =

11.737.) All students took the Stanford Reading Diagnostic Tests at the beginning of the

school year. Scores were available for 42 students and the mean score was 832.40

(*SD*=232.588.) Table 5 describes these test results.

Students with Learning Disabilities

In order for students to qualify for special education services for a specific

learning disability, it is necessary to document that the child does not achieve

commensurate with age and ability levels in one or more of the following areas: (a)

auditory memory; (b) auditory discrimination; (c) auditory processing; (d) visual

memory; (e) visual discrimination; (f) visual processing; (g) visual sequencing; (h) visual

motor integration; and or (i) perceptual motor speed when provided with learning

experiences appropriate for the child's age and ability levels. The student must also

demonstrate a severe discrepancy between intellectual ability and achievement in one or

more of the following areas: (a) oral expression; (b) listening comprehension; (c) written

expression; (d) basic reading skills; (e) reading comprehension; (f) mathematics

calculation; and (g) mathematics reasoning.

Students on the Autism Spectrum

For students to qualify for special education services for Autism, it is necessary to document that the child meets the following criteria: (a) has significant deficits in verbal and nonverbal communication; (b) has significant deficits in social interaction; (c) emotional disability has been ruled out as the primary cause of adverse impact to educational experience; (d) the adaptive, communication, and social interaction deficits result in adverse effect on educational performance in one or more areas; (e) The student requires specialized instruction/adaptations/accommodations/supports as a result of the autism that cannot reasonably be provided solely through regular education.

Students with Other Health Impairments

For students to qualify for special education services for an other health impairment, it is necessary to document that the child meets all of the following criteria: (a) the student has a documented chronic or acute health problem; (b) Due to health problem, the student has limited strength, vitality, alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to educational environment; (c) the limited strength, vitality, or alertness results in an adverse effect on educational performance; (d) Functional academic performance is significantly impacted; and (e) the student requires specialized instruction/adaptations/accommodations/supports as a result of the other health impairment that cannot reasonably be provided solely through regular education.

Students with an Emotional Disability

For students to qualify for special education services for an emotional disability it is necessary to document that the child meets one or more of the following criteria: (a) an inability to learn that cannot be explained by intellectual, sensory or other health factors; (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) A general pervasive mood of unhappiness or depression; and (d) A tendency to develop physical symptoms or fears associated with personal or school problems. In addition, to qualify as having an emotional disability: (a) social maladjustment must be ruled out as the primary cause of indentified ; (b) the characteristics listed above result in adverse effect on educational performance; and (c) The student requires specialized instruction/adaptations/accommodations/supports as a result of emotional disabilities that cannot reasonably be provided solely through regular education.

Students with a Speech and Language Impairment

For students to qualify for special education services for a speech and language impairment it is necessary to document that the student meets all of the following criteria: (a) The student has a communication disorder in articulation, voice, fluency, expressive language, and/or receptive language; (b) The communication disorder adversely affects the educational performance as demonstrated by academic and non-academic performance which is significantly below the level of students similar to their age; and (c) The student requires specialized instruction/adaptations/accommodations/supports as a result of speech/language impairment that cannot reasonably be provided solely through regular education.

Students with an Orthopedic Impairment

For students to qualify for special education services for an orthopedic impairment it is necessary to document that the child meets all of the following criteria: (a) The student has an orthopedic impairment; (b) As a result of this orthopedic impairment, the student exhibits physical limitations in the school environment; (c) The orthopedic impairment results in an adverse effect on educational performance in one or more instructional areas; and (d) The student requires specialized instruction/adaptations/accommodations/supports as a result of the orthopedic impairment that cannot reasonably be provided solely through regular education.

Materials

The following section describes the materials used in the tutoring and traditional conditions for teachers and students. First, the curriculum framework outlining the seventh grade classroom will be described. Next, materials for teachers for both conditions are described followed by condition specific materials. Then materials for students for both conditions are described followed by condition specific materials.

Curriculum Framework

Instructional materials common to both conditions included district adopted textbook and ancillaries. *The American Journey: Reconstruction to the Present* (Appleby, Brinkley, and McPherson, 2005) was the primary text used by each teacher for maps, graphics, and definitions. The seventh grade social studies curriculum followed a state mandated curriculum or Standards of Learning (SOLs) for United States History II 1877 – present in preparation for an end of course standardized test every May. The curriculum

was based on 8 standards and were split into units including: (a) Western Expansion; (b)

Immigration and Urbanization; (c) Industrialization; (d) Progressive Movement; (e)

Imperialism; (f) World War I; (g) The 1920s; (h) The Great Depression; (i) World War

II; (j) The Cold War; (k) Civil Rights; (l) Post-War Technology and Societal Change.

Appendix A lists these standards. This study focused on standard US II.3c

(Industrialization), US II.3d (Progressive Movement), and USII.3f (Imperialism).

Overlapping concepts in benchmarks a, c, and d of standard US II.3 include (a) reshaping

the nation; (b) emergence of modern America; and how (c) American life changed after

the Civil War. The local district provided a pacing guide that provided a timeline for each

unit with time for review before the end-of-course assessment.

Teacher Materials

The following section describes the materials used in the study. First, materials

for both conditions will be described followed by materials for each separate condition.

Both Conditions

Since the intervention materials are supplemental, the teachers created classroom

activities as usual. Manuals were prepared for both conditions. Each teacher received a

teacher manual. For the teachers that only taught class sections in the traditional

instruction condition, their entire binder was devoted to this condition. For the teachers

that taught class sections in both conditions, their binder was split in half with the first

half devoted to the traditional instruction condition and the second half devoted to the

peer tutoring condition. Contents are described under each condition.

Peer-Tutoring Condition

Adaptations to facilitate learning were developed for content from the SOLs that was identified as challenging for students. Individual note cards were created with mnemonic strategies on one side and answers on the reverse sides. For example, to help students learn the content, "Carnegie was a businessman who controlled the steel business" a keyword mnemonic strategy was developed. Since Carnegie was considered an unfamiliar name, a keyword, "car" was developed and then that keyword was interacted in a picture with the to-be-remembered content. For example, see Figure 1. One side of the card contained pictures of the interactive strategy of someone trying to steal Carnegie's car and Carnegie the cop yelling at the thief that he controls the steel car and the steel business. The other side of the card contained the peer tutoring directions and listed the question, answer, directions if the students answers the question correctly or incorrectly, and the mnemonic strategy students should use to remember the which industry Andrew Carnegie controlled. Question: "Who was Andrew Carnegie?" Answer: "Businessman that controlled the steel business." Directions: "If correct, go onto the next card. If wrong say, 'The keyword for Carnegie is Car.'" and the strategy: "To help you remember that the Carnegie was a businessman who controlled the steel business, remember this picture of a Carnegie the cop stopping someone from stealing his steel car." Each instructional unit consisted of 5 inch x 9 inch envelopes containing that unit's peer tutoring cards and directions. Each peer tutoring dyad had one envelope for each instructional unit.

Carnegie (CAR)   Businessman who
                                                          controlled the steel industry

Figure 1: Example of a Mnemonic Card

Teachers were provided a manual. Inside the first section of the manual was a set of questions with answers that described (a) the study's purpose; (b) the benefits of the study for students; (c) the materials; (d) the historical content covered; (e) teacher responsibilities, (f) when to use the material;, (g) where to keep the materials; (h) when to give the pretest; (i) what to do on day 1-4 of Industrialization; (j) what to do on day 1-4

of Progressives; (k) what to do on day 1-4 of Imperialism; (l) when to give the unit tests; (m) teacher responsibilities when students are using the materials; (n) how students record their progress; (o) what to do with classes not using the materials; (p) records teachers should maintain; (q) why each classroom was asked to participate; (r) what happens when a new student enrolls in the class; (s) what happens when a student withdraws from the class; (t) what happens when a student moves sections of a class; and (u) reasons for classroom observations (see Appendix B).

The second section of the manual was devoted to forms and copies of assessments. Included was a copy of the student assent form, parent consent form, teacher consent form, rules for classwide peer tutoring, student record sheet, teacher record sheet, tutoring condition classroom observation sheet, traditional condition observation sheet, pre/post test, and unit test (sections of the pre/post test) to be given after each teacher made unit test (see Appendixes C-L).

The third section of the manual contained all scripts and transparencies teachers used during days 1-4 of implementation for each unit (see Appendixes M, P and R). The script for the first day of implementation was the most detailed. Teachers were told to begin with an introduction:

Today we are going to use some cards to help us learn social studies information. I will pair up so we can use the cards in partners. On the front of the card will be a picture and on the back will be the instructions. I will pair you up later, but first let's look at an example. The instructions told the teacher to place a colored

photograph onto the overhead showing students what it looks like to, "quiz" each

other.

Next, the script told teacher to point out that while one student read the strategy on the

back, the other student studied the picture on the from. Next, the script read to model the

activity by placing a transparency of one of the cards on the overhead (see Appendix N).

The instructions said the following:

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask who is John Rockefeller. Who is John Rockefeller?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. He's the businessman who controlled the oil business.

Say: Let's pretend no one knew the answer. The script says I should say, "The

keyword for Rockefeller is rock. To help you remember that the Rockefeller was

a businessman who controlled the oil business, remember this picture of a rock

with oil on top of it."

Say: Then it says I should ask it again, "Who was John Rockefeller?"

Say: Right. He was the businessman who controlled the oil business. If you guys

still didn't know the answer, I would have read the card again.

Say: Let's do one more together.

The script said that after the teacher modeled another card (see Appendix O) she should

then review the directions:

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.

2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.

3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

The next part of the script asked teachers to pair off students:

Say: Each group needs to decide which person will be the general and which person will be the admiral. These roles only mean who will read first and who will look at the pictures first. Next time it will be reversed.

Say: (After the kids are ready) Ok, the Admirals will ask the questions first. I need all admirals to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

On the bottom of the script, teachers were reminded of what to do when students were working:

The teacher should walk around and make sure that:

1. One student reads the cards to their partner.

2. If it is incorrect, the student follows the directions on the back of the card.

3. If the student does not know the answer, the partner reads the strategy on the back of the card.

4. The students progress through the cards.

5. The students switch roles and follow steps 1-4.

After 15 minutes:

0. Have students record the date and length of time they used the cards in their

   folders.

1. Collect:

   a. Student Folders.

   b. Envelopes.

The script for day 2 of implementation during Industrialization was almost exact as day 1

however, it instructed teachers to only model one card instead of two cards. The script for

day 3 and 4 was the same as the script for day except the teacher was not instructed to

model another card. The teacher was instructed to remind students to study the picture

when their peer was reading the back of the cards.

The script for day 1 of implementation during Progressives was the same as day 1

for Industrialization except the card the teachers used to model the activity was one from

the Progressive unit. The script for days 2-4 was the same except the teacher was not

instructed to model the activity (see Appendix Q.).

The script for day 1 of implementation during the Imperialism unit was the same

as day 2 for Industrialization except the card the teachers used to model the activity was

one from the Imperialism unit. The script for days 2-4 was the same except the teacher

was not instructed to model the activity (see Appendixes R and S).

Traditional Instruction Condition

Teachers were provided a manual. Inside the first section of the manual was a set of questions with answers that described (a) the study's purpose; (b) the benefits of the study for students; (c) the historical content covered; (d) teacher responsibilities; (e) when to give the pretest; (f) when to give the unit tests; (g) why each classroom was asked to participate;, (h) what happens when a new student enrolls in the class; (i) what happens when a student withdraws from the class; (j) what happens when a student moves sections of a class; and (k) reasons for classroom observations.

The second section of the manual was devoted to forms and copies of assessments. Included was a copy of the student assent form, parent consent form, teacher consent form, traditional condition observation sheet, pre/post test, and unit tests (sections of the pre/post test) to be given after each teacher made chapter unit test (see Appendixes C-E; J-L)).

<div align="center">*Student Materials*</div>

The following section describes the student materials used in the study. First, materials for both conditions will be described followed by materials for each separate condition.

Both Conditions

Before instruction begins on a content unit, all teachers met to discus the Standards of Learning. Teachers first outlined the core curriculum that must be taught in all classes. Then, teachers looked at the common assessment (see Appendixes T-V) that they had designed the year before to make sure they match the Standards of Learning.

The teachers then designed a, "Word-up" activity (see Appendix W) to teach new and difficult vocabulary. They analyzed the Curriculum Framework for new and difficult words. One teacher would type the definitions in boxes and type a word bank below the definitions. Teachers assigned this activity at the beginning of the unit. Students would use the textbook to look up the words and write the correct word in the box.

On an average day, teachers began class with a warm-up on an overhead machine. The warm-ups consisted of review questions from previous units in preparation for the end of course state standardized test. Each day, the students answered one question. Each student's sheet had five questions typed out with blanks underneath where they copied the answer from a transparency on the overhead machine. The teacher's copy had the five questions with three multiple choice answers underneath. Students chose the answer they felt was correct. The teacher then discussed the answer with the class. For example, one question used during the Industrialization unit was, "What was the significance of the Battle of Little Bighorn?" Teachers gave students a photocopy of the overhead sheet where they wrote their answers (see Appendix X).

During the main activity, teachers usually would give the students a graphic organizer for students to take notes from a reading passage, primary source document, map, video clip, simulation, and /or class lecture. For example, during the Industrialization Unit, all five teachers showed a video on Sear's Catalogue to teach about the growth of national markets. Students watched the video and completed a worksheet (see Appendix Y). The teachers reviewed the worksheet and then showed the students examples from an 1897 Sear's Catalog reproduction.

During the Progressive unit, all five teachers used a PowerPoint presentation during a class lecture. The teacher projected a PowerPoint presentation onto either a television or a pull down screen and lectured. Students filled in the blanks (see Appendix Z) and the teacher progresses through the slides.

During the Imperialism Unit, all five teachers used copies of the *New York World* newspaper from 1898 to explain the definition of yellow journalism. Students first reviewed facts from the explosion of the USS Maine and then compared them with the newspaper's reporting on a t-chart (see appendix AA). All of the teachers also used the same mapping activity during the Imperialism unit. Students used an atlas to label important places (see Appendix BB). The teacher collected and graded the student maps. After all of the above activities, students placed these lessons in their notebooks and referred to them again at the end of the unit before the test.

To prepare for tests, all of the teachers used the same study guide (see Appendix CC). These guides had fill-in-the blank, multiple choice, and matching questions. Students completed them on their own and then teacher went over it in class to make sure the students had the correct answers.

Peer Tutoring Condition

In addition to the materials used in the lessons described above, each student was provided a folder. In the folder were the peer tutoring directions (see Appendix F) and the student record sheet (see Appendix G). The peer tutoring directions were split into three sections, (a) rules for tutoring, (b) identifying and correcting mistakes, and (c) a checklist of tasks. In the rules for tutoring section, students were instructed to talk only to their

partner about the peer tutoring program, talk in a quiet voice, to cooperate with their

partner, and to do their best. In the identifying and correcting mistakes section, students

were given directions of how to respond to their partner's answers and what students

should say. The corrections read like a script. For example, the

- ➢ If your partner says the wrong answer, say, *"You missed that one. Can you try again?"*

- ➢ If your partner gives you a partially correct answer say, *"Almost, can you think of anything else?"*

- ➢ If your partner takes longer than 3 seconds to give you the answer (count 1-one thousand, 2- one thousand, 3- one thousand) *read the answer on the back of the card AND the strategy.*

In the third section, students were provided a systematic check list. For example,

- ✓ Only one partner picks up the student folders.

- ✓ The other partner picks up the envelope with the cards.

- ✓ Sit with your partner.

- ✓ Begin asking and answering the questions with your partner.

- ✓ Fill out your tracking sheet in your folder.

- ✓ Put all of the tutoring materials away.

Students used this tracking sheet to record the date and length of time they used the

materials. The teacher kept envelopes and student folders in a black tub and brought the

materials out when the intervention was implemented.

Traditional Instruction Condition

Students were provided no materials other than the lessons written by their teacher. They used the materials described above to learn the content material. For example, during the Industrialization unit instead of using the cards to learn that Pittsburgh was the city where the steel industry grew and Chicago was the city where the meat packing industry grew, teachers in the traditional condition had students complete a map (see Appendix BB) Students labeled the states using the two letter abbreviation. Next students shaded each region in the United States a different color. Students then labeled Detroit, Michigan, Pittsburgh, Pennsylvania, and Chicago, Illinois. Students were given clip art pictures for each industry and cut and pasted them onto the map near each city. After the class was finished with this activity, students put it into their binders and reviewed the sheet before the unit test.

During the progressive unit, students in the traditional instruction condition used a fill-in-the-blank sheet instead of the cards to learn who Jane Addams was and how she developed Hull House (see Appendix DD). Students read an article and answered the questions. After the class was finished with this activity, students put it into their binders and reviewed the sheet before the unit test. During the Imperialism unit, instead of using the cards to learn that Panama Canal linked the Atlantic and Pacific Oceans, students in the traditional instruction condition read an article and filled in the blanks on the student version (see Appendix EE). After the class was finished, students put the activity away and reviewed it before the unit test.

Students in the traditional instruction condition used the same study guide as the tutoring condition. However, these students needed to use what they learned from class

lessons to complete the guide and could not rely on information learned from cards, as did students in the tutoring condition.

<div align="center">Data Sources</div>

The following section describes the dependent measures for this study. Separate dependent measures were used for students and teachers. Measures included a pretest, sections of the pre/post test, a post test, observations, a survey, and fidelity of treatment checklist.

<div align="center">*Both Condition Measures*</div>

The following section describes the measures used in both conditions. They included a pretest, sections of the pre/post test unit tests, a post test, observations, and a survey.

Pretest/post Test

The pretest and the post test were the same measure. They had the same 60 multiple choice questions to assess students content knowledge (see Appendix K). Content information for thirty of the questions were taught to students using traditional methods and the mnemonic cards. Since the cards included a strategy on the back of the cards to help students remember the content information, they were referred to as embedded strategy questions. For example, the strategy students were taught to help them remember that Andrew Carnegie was the businessman who controlled the steel industry, students were read, "To help you remember that the Carnegie was a businessman who controlled the steel industry, remember this picture of a Carnegie the cop stopping someone from stealing his steel car." Content information for the other 30 questions

taught only using traditional methods. For example, teachers used a matching activity called Word Up (see Appendix X). Students were expected to memorize this content with using this activity. Since no strategy was provided to help students remember the content, they were referred to as no strategy provided questions.

The 60 questions were equally divided between the three units of study. There were 20 questions from the Industrialization unit, 20 questions from the Progressive unit, and 20 questions from the Imperialism unit. The questions were also equally divided between embedded strategy items and no strategy provided items. The Industrialization unit had 10 embedded strategy questions and 10 no strategy provided questions as did the Progressive and Imperialism units. A sample question was, "Who was John Rockefeller? The answer choices were: (a) Businessman who controlled the steel industry; (b) businessman who controlled the railroad industry; (c) Businessman who controlled the oil industry; and (d) Businessman who controlled the banking industry. Of the 20 questions, 10 questions were embedded strategy items and 10 were no strategy provided items.

Unit Tests

After teachers administered the assessment they designed, they administered the students a unit test (see Appendix L) photocopied on green paper. These tests comprised of questions from the post test that were from the corresponding unit. For example, since the first 20 questions on the post test were devoted to content from the Industrialization unit, the teacher gave students these questions after she had finished instruction. Ten of the questions were embedded strategy items and 10 questions were no strategy provided items.

Survey

A survey was administered to all students. Students in each condition received different surveys (see Appendixes FF-HH). Students in the tutoring condition answered questions concerning their opinions about their social studies class last year and this school year. The questions were either three-level Likert type questions or open ended questions. One example of a three-level Likert type question was, "I like social studies this year." Students rated their agreement to this question by circling either a happy face:☺, a medium face:☻, or a sad face:☹. An example of an open ended question was, "What activities help you memorize history facts?" Students answered the question on two lines typed under the question. Students in the peer tutoring condition also answered questions addressing their attitudes about using the mnemonic/CWPT materials. The survey consisted of 17 questions consisting of: (a) nine questions based on a three-level Likert scale where higher scores will indicate positive perceptions and lower scores will indicate negative perceptions and (b) eight open ended questions. Questions focused on: (a) benefits of using the materials, (b) barriers to using the materials, and (c) opinions of history class (see Appendix FF). Students were interviewed when their answers seemed unclear or needed to be expanded upon.

Students in the traditional condition only answered questions concerning their opinions about their social studies class last year and this school year. The questions were the same as the questions at the beginning of the tutoring condition survey. They were either three-level Likert type questions or open ended questions. One example of a three-level Likert type question was, "I like social studies this year." Students rated their

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agreement to this question by circling either a happy face:☺, a medium face:☻, or a sad face:☹. An example of an open ended question was, "What activities help you memorize history facts?" Students answered the question on two lines typed under the question

The teacher survey addressed teacher attitudes about using the mnemonic/CWPT materials. The survey consisted of 15 questions consisting of: (a) six questions based on a three-level Likert scale where higher scores will indicate positive perceptions and lower scores will indicate negative perceptions and (b) eight open ended questions. These questions focused on: (a) benefits of using the materials and (b) barriers to using the materials.

Observations

For fidelity of treatment, classrooms were observed in all three units. Classes in the peer tutoring condition were observed in each unit twice during the peer tutoring activity and twice during traditional instruction for a total of 12 observations during the study. Classes in the traditional condition were observed twice in each unit for a total of six observations during the study. Observers used different observational sheets for different activities (see Appendixes H-I).

During the peer tutoring the observer used a checklist that was split into three sections: (a) beginning of the activity; (b) during the activity; and (c) completion of the activity. In the beginning of the activity, the observer wrote the time this section began and checked off the following tasks: (a) Students are paired; (b) One student is general the other is admiral; (c) Each student has their folder; (d) Each folder has peer tutoring instructions; (e) Each folder has a record sheet; and (f) Each dyad has a an envelope with

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a stack of cards. During the activity, the observer wrote the time this section began and checked off the following tasks: One student reads the cards to their partner; (b) If it is incorrect, the student follows the directions on the peer tutoring instructions; (c) If the student does not know the answer, the partner reads the strategy on the back of the card; (d) The students progress through the cards and (e) The students switch roles and follow steps 1-4. At the completion of the activity, the observer wrote the time this section began and checked off the following tasks: (a) Students recorded on their tracking sheet their number correct; (b) Students recorded on their tracking sheet the date and length of time used; and (c) Teacher collects the student folders and envelope containing the mnemonic cards.

During traditional instruction, the observer used an open ended sheet that was split into three sections: (a) Beginning of the class period; (b) Main activity of the class period; and (c) Wrap-up of class period. First, the observer recorded: (a) teacher name; (b) number of students in class; (c) the date; (d) title of unit; (e) class period; and (f) the observation number. The observer wrote examples of (a) what was seen, (b) what did the teacher/students did, and (c) the materials were used. Space was provided for the observer to describe the activities.

Procedures

This section describes the procedures followed in this study. These include descriptions of the protections of human participants and informed consent, procedures for all conditions, and condition-specific procedures.

Consent and Human Participants

The George Mason University Institutional Review Board and the school district reviewed and approved this study prior to implementation. Informed consent and assent were obtained from all teachers, students, and guardians for each student (see Appendixes B-D).

<center>*Instructional Procedures*</center>

The following sections describe the instructional procedures, Each sections is divided between all conditions, tutoring condition, and traditional instruction,

Both Conditions

Students were administered a pretest during the first day of implementation and a post-test on the last day of implementation. In between teachers spent approximately two weeks teaching each unit: (a) Industrialization, (b) Progressives, and (c) Imperialism. All teachers met before they began each unit and outlined the core curriculum that must be taught in all classes. Then, teachers looked at the common assessment (see Appendixes T-V) that they had designed the year before to make sure they match the Standards of Learning. The teachers then designed a, "Word-up" activity (see Appendix W) to teach new and difficult vocabulary. They analyzed the Curriculum Framework for new and difficult words. One teacher would type the definitions in boxes and type a word bank below the definitions. Teachers passed out the sheet and instructed students to use the glossary and index in the textbook to locate the answers. One teacher assigned this activity for homework. The teacher then reviewed the answers by asking for student volunteers to first read the definition and then read the matching vocabulary word.

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Students then placed this in their binders and could use the definitions when they completed their study guide at the end of the unit.

Each day, teachers began class with a warm-up activity. The teacher placed a transparency on the overhead machine (see Appendix X). Students were instructed to take their copy out of their binders and chose the correct answer from the provided choice. They copied that answer onto their worksheet.

During the main activity, teachers usually would give the students a graphic organizer for students to take notes from a reading passage, primary source document, map, video clip, simulation, and /or class lecture. For example, during the Industrialization Unit, all five teachers showed a video on Sear's Catalogue to teach about the growth of national markets (see Appendix Y). Students answered the first questions as an introduction to catalogs. They then answered the next set of questions in anticipation of the video. The teacher instructed students to correct their answers as they watched the video. The teachers reviewed the correct answers and passed out photocopies of an 1897 Sear's Catalog reproduction. Students then looked through the catalog to write down prices of items on their worksheet. When students finished, they placed the activity in their binders and used them to complete the study guide at the end of the unit.

During the Progressive unit, all five teachers used a PowerPoint presentation during a class lecture. The teacher projected a PowerPoint presentation onto either a television or a pull down screen and lectured. She lectured about each slide and instructed students to copy the highlighted items onto their notes sheet (see Appendix Z) as the

teacher progressed through the slides. When students finished, they placed the activity in their binders and used them to complete the study guide at the end of the unit.

During the Imperialism Unit, all five teachers used copies of the *New York World* newspaper from 1898 to explain the definition of yellow journalism. The teacher projected a transparency listing the facts from the explosion of the USS Maine. Then, the teacher placed transparencies of the front page of various newspapers reporting the even. Students then compared a t-chart (see appendix AA) to compare them. When students finished, they placed the activity in their binders and used them to complete the study guide at the end of the unit.

During the Imperialism unit, teachers used the same mapping activity. The teacher passed out a map and an atlas. Students used the atlas and labeled the important places listed on their worksheet (see Appendix II). When students were finished, the teacher collected and graded the student maps. When students finished, they placed the activity in their binders and used them to complete the study guide at the end of the unit.

To prepare for tests (see Appendixes T-V), all of the teachers passed out the same study guided 3 or 4 days before the test (see Appendix CC). Teachers gave students the option of starting the study guide early or waiting until the day before the test to complete it in class. Students used their notes from earlier activities to complete the fill-in-the-blank, multiple choice, and matching questions. After students completed them on the teacher went over it in class to make sure the students had the correct answers.

Students took the same assessments at the end of each unit. The teachers participating in this study designed and administered the same end of unit teacher made

chapter test. Students also took other quizzes and assessments for their quarter grade that were be included in the data collected. Teachers administered a survey to students at the end of the intervention each evaluating their activity, peer tutoring or traditional instruction.

Peer Tutoring Condition

Throughout the intervention, the teacher provided instruction using the traditional materials described above. Teachers supplemented the lessons with the tutoring materials. Teachers implemented the study four times during each unit for a total of 12 sessions. On the first day of the intervention in the Industrialization Unit, the teacher followed a script. In the script, teachers were told to begin with an introduction:

> Today we are going to use some cards to help us learn social studies information. I will pair up so we can use the cards in partners. On the front of the card will be a picture and on the back will be the instructions. I will pair you up later, but first let's look at an example." The instructions told the teacher to place a colored photograph onto the overhead showing students what it looks like to, "quiz" each other (see Appendix M).

Next, teachers pointed out that while one student read the strategy on the back, the other student studied the picture on the front. Teachers then modeled the activity by placing a transparency of one of the cards on the overhead (see Appendix N). Teachers read the following instructions:

> Say: While I read the back of the card, you look at the picture.
>
> Say: It says for me to ask who is John Rockefeller. Who is John Rockefeller?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. He's the businessman who controlled the oil business.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword for Rockefeller is rock. To help you remember that the Rockefeller was a businessman who controlled the oil business, remember this picture of a rock with oil on top of it."

Say: Then it says I should ask it again, "Who was John Rockefeller?"

Say: Right. He was the businessman who controlled the oil business. If you guys still didn't know the answer, I would have read the card again.

Say: Let's do one more together (see Appendix O).

After the teacher modeled another card, she reviewed the directions:

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.

2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.

The teacher instructed students to take out the peer tutoring directions from their folders (see Appendix F). She read to the students the peer tutoring directions. She read to students that they are to talk only to their partner about the peer tutoring program, talk in a quiet voice, cooperate with their partner, and to do their best. She then read how to identify and correct mistakes by providing examples of what students should say. For example,

➢ If your partner says the wrong answer, say, *"You missed that one. Can you try again?"*

➢ If your partner gives you a partially correct answer say, *"Almost, can you think of anything else?"*

➢ If your partner takes longer than 3 seconds to give you the answer (count 1-one thousand, 2- one thousand, 3- one thousand) *read the answer on the back of the card AND the strategy.*

She then read the student systematic check list. For example,

✓ Only one partner picks up the student folders.

✓ The other partner picks up the envelope with the cards.

✓ Sit with your partner.

✓ Begin asking and answering the questions with your partner.

✓ Fill out your tracking sheet in your folder.

✓ Put all of the tutoring materials away.

3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Teachers then paired students and asked students to choose who would be the general and who would be the admiral. Students were then instructed to have the admirals come up, get an envelope with the cards inside, and begin the activity. When students were engaged in the activity, the teacher walked around the room making sure students studied the picture while their partner read the strategy on the back. After 15 minutes, the teacher explained how to complete the student record sheet. She instructed students to record the

date and length of time they used the cards in the appropriate boxes and then collected the envelopes and folders.

On day 2 of implementation during Industrialization unit was almost exact as day 1 however, teachers only modeled one card instead of two cards (see Appendix N). All other procedures were exactly the same. On day 3 and 4 during the Industrialization unit, the procedures were exactly the same as day 2, however, the teacher was did not model a card. The teacher reread to students the rules and procedures for peer tutoring and reminded them to study the picture when their peer was reading the back of the cards. After 15 minutes, the teacher reminded students to complete the record sheet. The teacher roamed around the room and helped any students complete the chart as needed. She then collected the envelopes and folders.

On day 1 of implementation during the Progressives unit the teacher followed a script. In the script, teachers were told to begin with an introduction:

Today we are going to use some cards to help us learn social studies information. I will pair up so we can use the cards in partners. On the front of the card will be a picture and on the back will be the instructions. I will pair you up later, but first let's look at an example." The instructions told the teacher to place a colored photograph onto the overhead showing students what it looks like to, "quiz" each other.

Next, teachers pointed out that while one student read the strategy on the back, the other student studied the picture on the front. Teachers then modeled the activity by placing a

transparency of one of the cards on the overhead (see Appendix Q). Teachers read the

back of the card:

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask what is a union. What is a union?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. A group of people who fought for better working conditions.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword

for union is onion. To help you remember that unions were a group of people who fought

for better working conditions, remember this picture of a group of onions demanding

better working conditions."

Say: Then it says I should ask it again, "What was a union?"

Say: Right. A group of people who fight for better working conditions. If you guys still

didn't know the answer, I would have read the card again.

After the teacher modeled the card, she reviewed the directions:

1. What should my partner do when I am reading the back of the card? (Look at the

   picture.) Remember that the whole purpose of these cards is to use the picture to

   help you remember the history information.

2. (Pass out their folders.) Each person gets a two pocket folder for this activity.

   Inside the folder are directions. Let's go over those directions.

The teacher instructed students to take out the peer tutoring directions from their folders

(see Appendix F). She read to the students the peer tutoring directions. She read to

students that they are to talk only to their partner about the peer tutoring program, talk in

a quiet voice, cooperate with their partner, and to do their best. She then read how to identify and correct mistakes by providing examples of what students should say. For example,

> ➢ If your partner says the wrong answer, say, *"You missed that one. Can you try again?"*

> ➢ If your partner gives you a partially correct answer say, "*Almost, can you think of anything else?"*

> ➢ If your partner takes longer than 3 seconds to give you the answer (count 1-one thousand, 2- one thousand, 3- one thousand) *read the answer on the back of the card AND the strategy.*

She then read the student systematic check list. For example,

- ✓ Only one partner picks up the student folders.

- ✓ The other partner picks up the envelope with the cards.

- ✓ Sit with your partner.

- ✓ Begin asking and answering the questions with your partner.

- ✓ Fill out your tracking sheet in your folder.

- ✓ Put all of the tutoring materials away.

3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Teachers then paired students and asked students to choose who would be the general and who would be the admiral. Students were then instructed to have the generals come up, get an envelope with the cards inside, and begin the activity. When students were

engaged in the activity, the teacher walked around the room making sure students studied the picture while their partner read the strategy on the back. After 15 minutes, the teacher reminded students to complete the record sheet. The teacher roamed around the room and helped any students complete the chart as needed. She then collected the envelopes and folders.

On day 2-4 of implementation during the Progressive unit was almost exact as day 1 however, teachers only read the strategy statement, "The keyword for union is onion. To help you remember that unions were a group of people who fought for better working conditions, remember this picture of a group of onions demanding better working conditions. The teacher modeled one card instead of two cards. All other procedures were exactly the same. The teacher reviewed the rules and procedures for peer tutoring that were in the student folders and reminded them to study the picture when their peer was reading the back of the cards.

On day 1 of implementation during the Imperialism unit teachers read the following script:

Say: Remember Emily reading the card and Sarah listening and looking at the picture?

Put the overhead of Yellow Journalism up (see Appendix S). Students should be able to see both the front and the back of the card on the overhead.

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask how did yellow journalism help cause the Spanish American War. So, how did yellow journalism help cause the Spanish American War?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. Newspaper owners published made up stories to make Americans hate Spain.

Say: Let's pretend no one knew the answer. The script says I should say, the keyword for yellow journalism is yellow. To help you remember that yellow journalism helped cause the Spanish American War by publishing made up stories to make Americans hate Spain, remember this picture of a man reading a yellow newspaper with anti-Spain headlines and just kidding and not really underneath them.

Say: Then it says I should ask it again, "How did yellow journalism help cause the Spanish American War?"

Say: Right. Newspaper owners published made up stories to make Americans hate Spain. If you guys still didn't know the answer, I would have read the card again.

After the teacher modeled the card, she reviewed the directions:

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.

2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.

The teacher instructed students to take out the peer tutoring directions from their folders (see Appendix F). She read to the students the peer tutoring directions. She read to students that they are to talk only to their partner about the peer tutoring program, talk in a quiet voice, cooperate with their partner, and to do their best. She then read how to identify and correct mistakes by providing examples of what students should say. For example,

➢ If your partner says the wrong answer, say, *"You missed that one. Can you try again?"*

➢ If your partner gives you a partially correct answer say, "*Almost, can you think of anything else?"*

➢ If your partner takes longer than 3 seconds to give you the answer (count 1-one thousand, 2- one thousand, 3- one thousand) *read the answer on the back of the card AND the strategy.*

She then read the student systematic check list. For example,

✓ Only one partner picks up the student folders.

✓ The other partner picks up the envelope with the cards.

✓ Sit with your partner.

✓ Begin asking and answering the questions with your partner.

✓ Fill out your tracking sheet in your folder.

✓ Put all of the tutoring materials away.

3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Teachers then paired students and asked students to choose who would be the general and who would be the admiral. Students were then instructed to have the generals come up, get an envelope with the cards inside, and begin the activity. When students were engaged in the activity, the teacher walked around the room making sure students studied the picture while their partner read the strategy on the back. After 15 minutes, the teacher reminded students to complete the record sheet. The teacher roamed around the room and helped any students complete the chart as needed. She then collected the envelopes and folders.

The procedures for day 2-4 during the Imperialism unit were almost the same except the teacher did not model the activity. The teacher did remind students of the rules and procedures for peer tutoring and to remember to study the picture when their peer was reading the back of the cards. The teacher only read the instructions:

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.

2. (Pass out their folders.) Each person gets a two-pocket folder for this activity. Inside the folder are directions. Let's go over those directions.

3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Teachers then paired students and asked students to choose who would be the general and who would be the admiral. Students were then instructed to have the generals come up and get an envelope with the cards inside and begin the activity. When students were

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engaged in the activity, the teacher walked around the room making sure students studied the picture while their partner read the strategy on the back. After 15 minutes, the teacher reminded students to complete the record sheet. The teacher roamed around the room and helped any students complete the chart as needed. She then collected the envelopes and folders.

Traditional Instruction Condition

Students participated in the above sample teacher designed lessons. At the end of training, students took a survey addressing their attitudes about using the traditional instruction materials (See Appendix G).

<div align="center">Testing Procedures</div>

The following section describes the procedures for each assessment tool used in the study. These include the pre/post test, unit tests, and surveys.

Pretest/post Test

The teacher passed out the bubble sheet called a scantron (see Appendix JJ) and students wrote their name, class period, teacher name, and pre or post on the bottom of the scantron. The teacher passed out a pre/post test in a manila folder to each student. The student used the manila folder for a tent to simulate individual study carols so students could not see another student's answers. Students then read each question and marked their answer on the scantron. If according to the student's Individual Education Plan a student received the accommodation of writing on test, the student did not use a scantron but instead circled their answers on the test.

Unit Tests

After the student completed the teacher designed test, students were given the unit test photocopied on green paper. The teacher then instructed students to turn their scantron over and answer the questions on the green side of the scantron. The students used the same manila folder for a tent to simulate individual study carols so students could not see another student's answers. Students then read each question and marked their answer on the scantron. If according to the student's Individual Education Plan a student received the accommodation of writing on test, the student did not use a scantron but instead circled their answers on the test.

Surveys

The following section describes the procedures for administering the surveys. First, the student procedures are described followed by the teacher procedures.

Student survey. The teacher passed out the survey to students. Students put their name and class period at the top. The teacher read the directions and explained that if they agreed with the statement, they were to circle the smiley face, if they were undecided, they should circle the neutral fact and if they disagreed with the statement, they should circle the unhappy face. Students were directed to answer each question as best as they could. The teacher collected each survey when the students were finished.

Teacher survey. The researcher gave each teacher the survey and asked him or her to complete all questions. The teachers returned the survey to the researcher when they were finished.

<center>*Scoring Procedures*</center>

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This section describes the scoring procedures and reliability for the measures used in the study. They include the tests and surveys.

Tests

Students answered the pretest, unit tests, sections of the pre and post test and post test questions on a scantron bubble sheet (see Appendix JJ). The researcher created answer keys for each test. Each answer key was given to another social studies teacher to verify correct answers. All students wrote their name, class period, and subject on the scantron sheet and colored in the correct answer on the sheet. The researcher then scanned the answer sheets in a machine that printed the correct answer next to incorrect answers. Each scantron sheet was visually inspected for duplicate answers. Often if a student did not thoroughly erase a mistake, the machine marked it as incorrect. After visually inspecting each scantron, the researcher entered correct and incorrect answers into SPSS. If on a special education student's Individual Education Plan's accommodation page it stated that they mark on test, these students did not answer on a scantron sheet. They circled the answer directly on the test. The researcher corrected their test by hand and then entered the information into SPSS.

Score entry verification. Each scantron sheet provided a total score for each test. The researcher entered this score and compared it to the total score SPSS created by adding scores for each question. If the totals did not match, the researcher visually inspected the scantron sheet again and reentered each question's score until the totals matched. Reliability scores eventually reconciled to 100%.

Surveys

The following section describes the scoring procedures for the student and teacher surveys. This is followed by the reliability of scoring for each survey.

Student surveys. The researcher entered the three-level Likert typed questions directly into SPSS. If the student answered positively, the question was assigned a code of three. If the student answered neutrally, the question was assigned a two and if the student answered negatively, the question was assigned a one. Clerical reliability was established at 100% by a teacher unfamiliar with the study that matched and verified the accuracy of the data entry from the surveys.

The open ended questions were treated as transcripts and coded for similar themes or popular answers. These themes or answers were entered into a chart where the researcher recoded the survey responses by marking the frequency to which students answered each question (see Appendixes KK). If a student wrote, "I don't know" or left the answer blank, it was marked as no answer.

Teacher surveys. The Likert-typed questions and open ended questions were not entered into SPSS. Since there were only three teachers in the tutoring condition and one teacher in the traditional condition that completed the survey, the answers were responses were reported individually.

Reliability of surveys. Reliability for the Likert-typed questions was established at 100% by a teacher unfamiliar with the study. Reliability for the open-ended questions was established at 95% by the same teacher who was unfamiliar with the study.

Fidelity of Treatment

All teachers in the peer tutoring condition used a same script for each day the intervention was implemented. In addition, each class period participating in the study was observed twice per unit during traditional instruction and twice per unit during peer tutoring instruction for (a) consistency with implementing the intervention for the appropriate amount of time, (b) consistency following the scripts, and (c) consistency of not using mnemonic procedures during traditional instruction. In order to do that, specific observation sheets were created.

During traditional instruction, the observer used an open ended sheet that was split into three sections: (a) beginning of the class period, (b) main activity of the class period, and (c) wrap-up of class period. First, the observer recorded: (a) teacher name; (b) number of students in class; (c) the date; (d) title of unit; (e) class period; and (f) the observation number. The observer wrote examples of (a) what was seen, (b) what did the teacher/students did, and (c) materials were used. The purpose of these observations was to make sure no mnemonic strategies were being used in the traditional condition and to ensure that teachers were using similar traditional methods. Space was provided for the observer to describe the activities (see Appendix J). During 30% of the observations, a second observer was present. Of these observations, fidelity criteria for implementation were met for 100% of the time. The observers described the same activities each time.

During the peer tutoring the observer used a checklist that was split into three sections: (a) beginning of the activity, (b) during the activity, and (c) completion of the activity. In the beginning of the activity, the observer wrote the time this section began

and checked off the following tasks: (a) students are paired; (b) one student is general the other is admiral; (c) each student has their folder; (d) each folder has peer tutoring instructions; (e) each folder has a record sheet; and (f) each dyad has a an envelope with a stack of cards. During the activity, the observer wrote the time this section began and checked off the following tasks: (a) one student reads the cards to their partner; (b) if it is incorrect, the student follows the directions on the peer tutoring instructions; (c) If the student does not know the answer, the partner reads the strategy on the back of the card; (d) the students progress through the cards; and (e) the students switch roles and follow steps 1-4. At the completion of the activity, the observer wrote the time this section began and checked off the following tasks: (a) students recorded on their tracking sheet the date and length of time used and (b) teacher collects the student folders and envelope containing the mnemonic cards (see Appendix I). During 30% of the observations, a second observer was present. Of these observations, fidelity criteria for implementation were met for 95% of the time. The observers checked off each phase of the intervention at 100% but had some variability for time spent on each phase of the activity.

4. Results

This chapter presents the results for the study. The means of student performance in both treatments on the pretest at the beginning of the intervention was compared (see Table 7). Because students in the tutoring condition scored mean of 20.85 (SD = 6.43) and students in the traditional condition scored a mean of 19.47 (SD = 6.59) an independent sample t-test was run to determine if these differences were statistically significant. Although the groups had demonstrated homogeneity of variance, the tutoring condition scored statistically higher at pretest, $t(1,184) = 2.418$, $p = .017$. In addition, students in the tutoring condition scored a higher mean on the embedded strategies items 10.97 (SD=3.87) than students in the no strategies provided items 9.63 (SD=4.04). Another independent sample t-test was run to determine if these differences were statistically significant. Although the groups had demonstrated homogeneity of variance, there was a statistically significant main effect for the embedded strategy items $t(1,184) = 2.310$, $p = .022$. There was no statistically significant main effect for the no strategies provided items $t(1,184) = 1.934$, $p = .055$.

For these reasons, gain scores were used in the final analysis. Gains scores were computed by subtracting the total score on the pretest from the student's total score on the post test. The gain score controls for individual differences in pretest scores by measuring the posttest score relative to each student's pretest score. Table 8 includes a

description of the research questions, dependent measures, and data analysis methods. This is followed by a description of the results by each research question and also supplemental analyses.

Table 7

Pretest Scores for Both Conditions

	Condition					
	Tutoring			Traditional		
	n	*M*	*SD*	*n*	*M*	*SD*
Total Pretest Scores	95	20.85	6.43	91	19.47	6.59
Embedded Strategy Items		10.97	3.87		9.63	4.04
No Strategies Provided Items		9.87	3.54		8.88	3.77

Table 8

Dependent Variables, Measures, and Data Analyses

Research Questions	Unit of Analysis	Dependent Measures	Data Analyses
RQ 1: Gain scores for item type by condition on delayed post test	Students	1. Pretest • Embedded Strategies Items • No Strategies Provided Items 2. Post Test • Embedded Strategies Items • No Strategies Provided Items	Repeated measures ANOVA Simple effects test if interaction
RQ 1: Gain scores for item type by condition on delayed post test	Classes	Same	Same
RQ 2: Gain scores for item type by condition and student type on delayed post test	Students	Same	Same
RQ 3: Gain scores for item type by condition by class type on delayed post test	Students	Same	Same
RQ 4: Student and teacher Opinions	NA	Student Survey Teacher Survey	Frequencies Qualitative analysis

Note. RQ – Research question, ANOVA = Analysis of variance

Research Question 1

Are content knowledge overall post test scores for students receiving strategic mnemonic strategies embedded within a peer tutoring delivery system significantly different from students receiving traditional instruction?

Measures used to answer this question included gain score from pretest to post test. Gains scores were computed by subtracting the total score on the pretest from the student's total score on the post test. The gain score controls for individual differences in pretest scores by measuring the posttest score relative to the each student's pretest score.

Delayed Post Test Gain Scores

Descriptive data of mean gain scores for the effect of instruction of recall of items are on Table 9 and Figure 2. The tutoring condition earned a mean gain score of 32.74 (SD = 7.93) and the tradition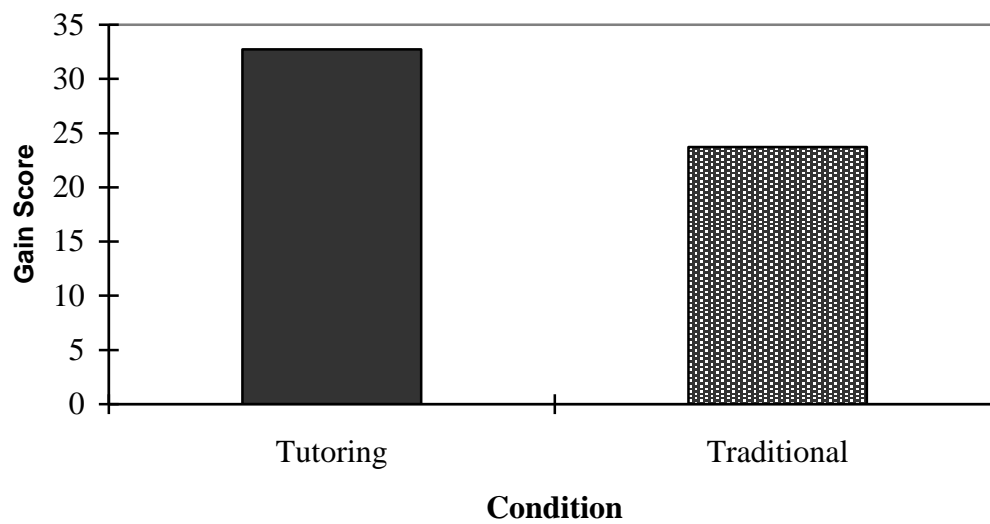al condition earned a mean gain score of 23.72 (SD = 10.86.) The effect size was calculated for peer tutoring vs. traditional by total gain score by using the following formula $\dfrac{\overline{X}_E - \overline{X}_C}{\dfrac{SD_E + SD_C}{2}}$. The resulting effect size for total gain score was .96.

Table 9

Post Test Gain Scores

	Condition					
	Peer tutoring			Traditional		
	n	*M*	*SD*	*n*	*M*	*SD*
Total Post Test Gain Scores	95	32.74	7.93	91	23.72	10.86
Post Test Scores by Item Type						
Embedded Strategies	95	17.10	4.64	91	10.79	5.60
Non Embedded Strategies	95	15.64	4.68	91	12.93	6.45

Figure 2. Delayed Post Test Gain Scores by Condition

Delayed Post Test Gain Score by Item Type

The tutoring condition earned a mean gain score of 17.10 (SD = 4.64) on embedded strategies items and a mean gain score of 15.64 (SD = 4.68) on no strategies provided items while the traditional condition earned a mean gain score of 10.79 (SD = 5.60) on embedded strategies items and 12.93 (SD = 6.45) on the no strategies provided items (see table 9). The effect size was calculated using the above formula. The effect for the embedded strategy items was 1.22 and the effect size for the non embedded strategies was 48.

Gain scores were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor with treatment group (peer tutoring vs. traditional) by item type (embedded strategies vs. no strategies) which yielded a statistically significant main effect for condition, $F(1,184) = 42.102$, $p = .000$. Main effect for item type was not statistically significant, $F(1,184) = .822$, $p = .366$. Results also yielded a statistically significant interaction for item type by condition $F(1,184) = 23.145$, $p = .000$. This means that the students in the tutoring condition performed statistically higher on the embedded strategy items than on the no strategy provided items. Students in the traditional condition performed statistically higher on the no strategy provided items than the embedded strategy items.

The follow up tests across item type for students in the tutoring condition yielded a significant effect across item type in favor of the embedded strategy items, $t(1,94) =$

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2.904, p = .005. This means that the use of the mnemonic materials facilitated recall on item type. The follow up simple effects test across item students in the traditional condition also yielded a statistically significant effect across the two item types. This time, however, the simple effects test between condition and item type on gains score for posttest favored the no embedded strategies items, $t(1,90)$ = -3.850, p = .000. This means that students in the traditional information found the embedded strategies content more difficult. Effect sizes were computed for condition by item type using the above formula. The resulting effect size for embedded strategy items was 1.23, while the effect size for the no strategy provided items was .48.

Class as Unit of Analysis

A supplemental analysis was performed with class as the unit of analysis. Because classes were assigned at random, data were also entered into a similar analysis but using class, rather than student as the unit of analysis.

Total gain score on delayed post test. Table 10 and Figure 3 illustrate how these data essentially confirmed the findings when students were employed as a unit of analysis. The tutoring classes earned a mean gain score of 32.17 (SD = 3.72) and the traditional classes earned a mean gain score of 23.68 (SD = 6.09). The effect size was calculated using the above formula. The effect size was 1.73.
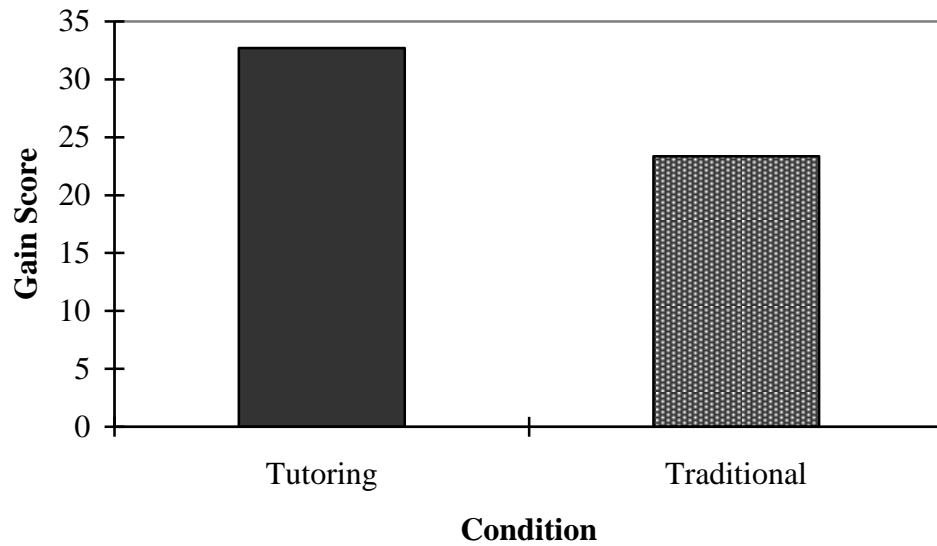
Figure 3. Delayed Post Test Gain Score by Condition with Class as Unit of Analysis

The tutoring classes earned a mean gain score of 17.06 (*SD* = 2.43) on the embedded strategies items and a mean gain score of 15.65 (*SD* = 4.48) on the no strategies provided items. The traditional classes earned a mean gain score of 10.63 (*SD* = 5.85) on the embedded strategies items and a mean gain score of 12.73 (*SD* = 6.86) on the no strategies provided items.

Table 10

Gain Scores with Class as the Unit of Analysis

	Condition					
	Tutoring			Traditional		
Post Test Gain Score	32.71	3.72		23.36	3.81	
Post Test Items	*n*	*M*	*SD*	*n*	*M*	*SD*
Embedded Strategies	4	17.06	2.43	4	10.63	1.75
Non Embedded Strategies	4	15.65	1.34	4	12.73	2.05

Gain scores were entered into entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor on treatment group (peer tutoring vs. traditional) by item type (embedded strategies vs. no strategies) which yielded a statistically significant main effect for condition, $F(1,6) = 12.281$, $p = .013$. Main effect for item type was not statistically significant, $F(1,6) = 1.146$, $p = .160$. There was a statistically significant interaction effect for item type (embedded strategies vs. no strategies) by condition (tutoring vs. traditional), $F(1,6) = 29.744$, $p = .002$. This means that classes in the tutoring condition performed statistically better on the embedded strategy questions. Effect sizes were computed for condition by item type using the above formula. The resulting effect size for embedded strategy items was 1.23, while the effect size for the no strategy provided items was .48.

The follow up simple effects tests across item type for students in the tutoring condition yielded no statistically significant effect across item type, $t(1,3) = 2.265$, $p = .108$. The follow up simple effects test across item type in the traditional condition yielded a statistically significant effect across the two item types, $t(1,3) = -12.882$, $p = .001$. The simple effects test between condition and item type on gain score for posttest favored the no embedded strategies items. This means that classes in the traditional information found the embedded strategies content more difficult.
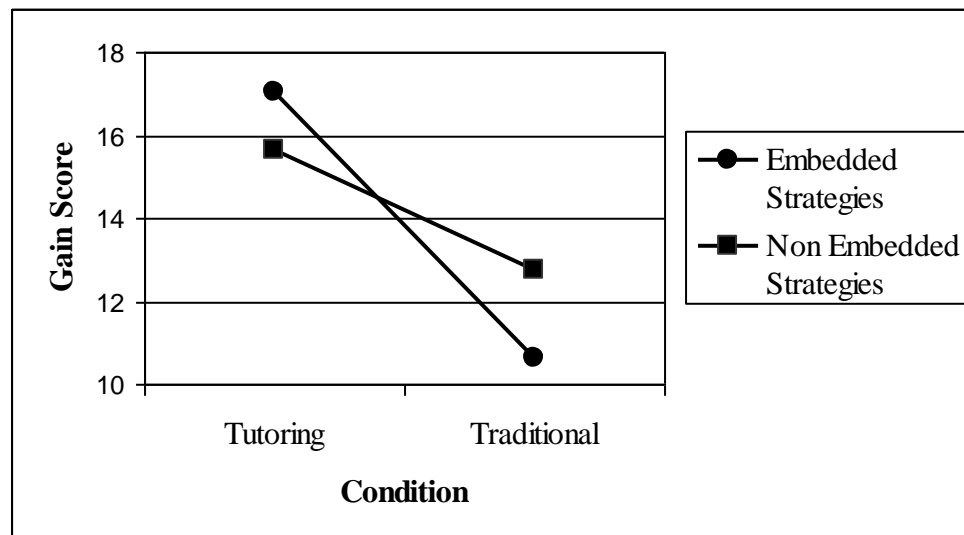

Figure 4. Delayed Post Test Gain Scores by Condition and Item Type

Research Question 2

Are content knowledge overall post test scores for students with disabilities receiving strategic mnemonic strategies embedded within a peer tutoring delivery system significantly different from students with disabilities receiving traditional instruction? The second question addressed the effects of instruction using embedded strategies vs. no strategies and by student type (special education vs. general education.) Measures used to answer this question included a gain score from pretest to post test.

Total Gain Score

The general education students in the tutoring condition earned a gain score of 33.00 (*SD* = 8.44) and in the traditional condition earned a mean gain score of 24.72 (*SD* = 19.47). The students with disabilities in the tutoring condition earned a gain score of 31.95 (*SD* = 6.17) and in the traditional condition earned a mean gain score of 19.94 (*SD* = 11.75). Descriptive data for the effect of instruction of recall of items are listed on Table 11 and illustrated in Figures 5 , and 6. The effect size was calculated using the above formula. The effect size for the general education students is .59. The effect size for the students with disabilities is 1.34.

Table 11

Post Test Gain Scores by Student Type

		Condition				
		Tutoring			Traditional	
Post Test Gain Scores						
	General Education	72	33.00	8.44	72	24.72	10.47
	Special Education	23	31.95	6.17	19	19.94	11.75
Embedded Strategies Items						
	General Education	72	17.11	4.96	72	11.37	5.53
	Special Education	23	17.08	3.55	19	8.57	5.43
	Total	95	17.10	4.64	91	10.79	5.60
No strategies Provided Items						
	General Education	72	15.88	4.73	72	13.34	6.10
	Special Education	23	14.86	4.54	19	11.36	7.62
	Total	95	15.64	4.68	91	12.93	6.45

Delayed Post Test Gain Scores by Item Type

The general education students in the tutoring condition earned a gain score of

17.11 (SD = 4.96) on embedded strategies items and 15.88 (SD = 4.73) on no strategies

provided items while the general education students in the traditional condition earned a

gain score of 11.37 (SD = 5.53) on embedded strategies items and 13.34 (SD = 6.10) of

the no strategies provided items. The students with disabilities in the tutoring condition

earned a gain score 17.08 (SD = 3.55) on embedded strategies items and 14.86 (SD =

100

4.54) on no strategies provided items while the students with disabilities in the traditional

condition earned gain score 8.57 (SD = 5.43) on embedded strategies items and 11.36

(SD = 25.41) of the no strategies provided items.

Data were entered into an analysis of variance (ANOVA) with repeated measures

analysis on the recall factor for condition (peer tutoring vs. traditional) by student type

(special education vs. general education) by item type (embedded strategies vs. no

strategies provided) which yielded a statistically significant main effect by condition,

$F(1,182) = 37.385$, p = .000. Main effect for item type, $F(1,182) = .537$, p = .464, and

category were not statistically significant $F(1,182) = 3.075$, p =.081. Results also yielded

statistically significant interaction effect between item type and condition $F(1,182) =$

20.683, p =.000. Results yielded no statistically significant interaction effect of item type

by student type $F(1,182) = .010$, $p = .922$, student type by condition $F(1,182) = 1.265$, p

= .262, nor item type by student type by condition $F(1,182) = 1.010$, $p=.316$.

The follow up simple effects tests across item type for general education students

in the tutoring condition yielded a significant effect across item type in favor of the

embedded strategy items, $t(1,71) = 2.168$, $p = .033$. This means that the use of the

mnemonic materials facilitated recall on item type. The follow up simple effects test

across item for general education students in the traditional condition also yielded a

statistically significant effect across the two item types, $t(1,71) = -3.273$, $p = .002$. This

time however, the simple effects test between condition and item type on gains score for

posttest favored the no embedded strategies items. This means that general education

students in the traditional information found the embedded strategies content more

difficult. The follow up simple effects test for students with disabilities in the tutoring condition yielded no significant effect across item type, $t(1,22) = 1.994$, $p = .059$. While students with disabilities in the tutoring condition descriptively scored higher on embedded strategy items, statistically they scored similarly on both item types. This means that the mnemonic materials help students with special needs increase their recall of non embedded items. The follow up simple effects test for students with disabilities in the traditional condition also yielded no significant effect across item type, $t(1,18) = -1.991$, $p = .062$. While students with disabilities in the traditional condition descriptively scored higher on the no strategy provided items, statistically they scored similarly on both item types. This means that both these students found both item types difficult to recall.

Effect sizes were computed for condition by item type by student type using the above formula. The resulting effect size for the embedded strategy items for general education students was 1.09, students with disabilities was 3.79, and for the total sample was 1.23. The effect size for the no strategy provided items for general education students was .46, and for students with disabilities the effect size was .57.
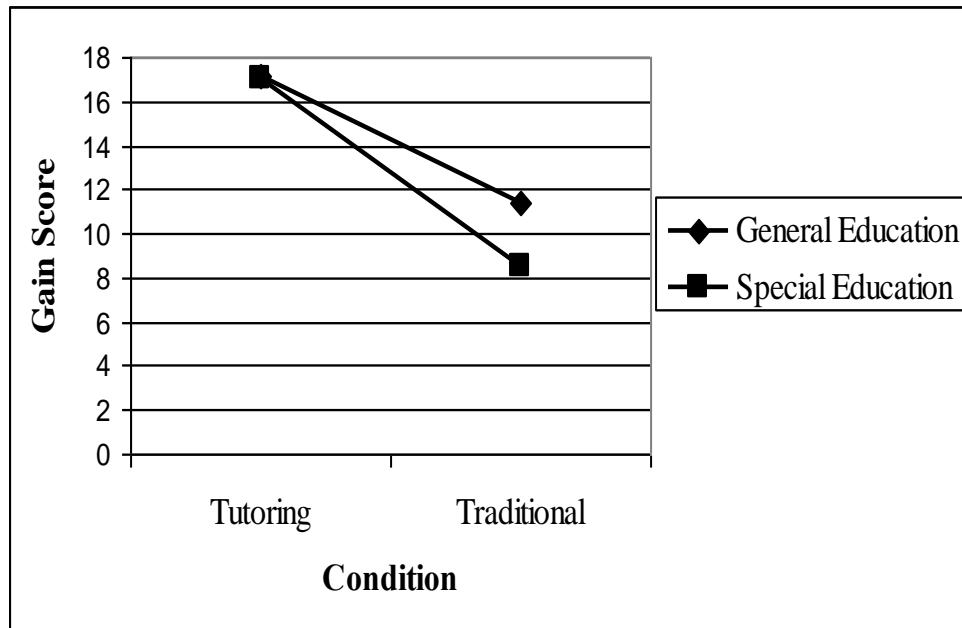
Figure 5. Post test Gain Scores of Embedded Strategy Items by Condition and Student
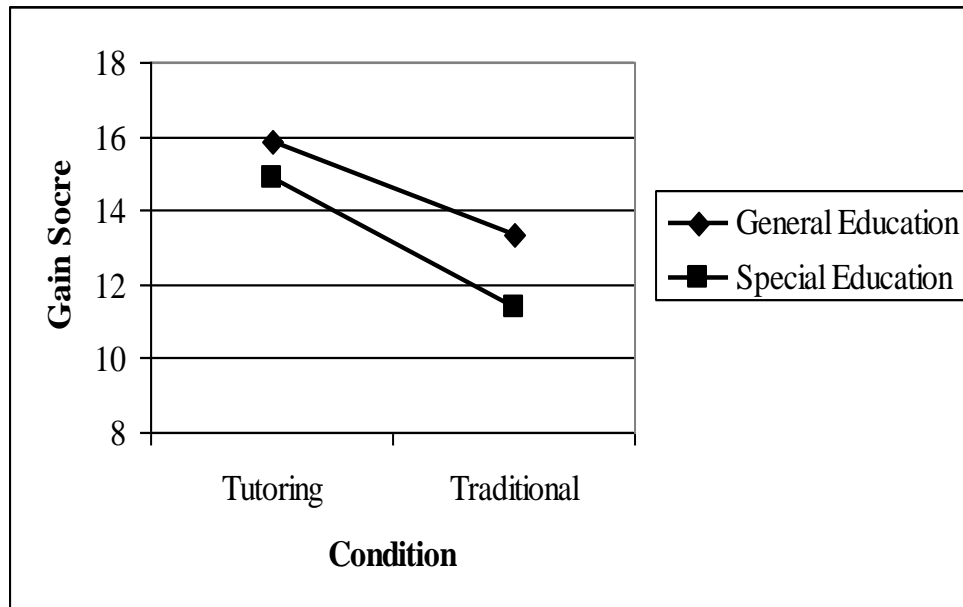
Type.

Figure 6. Post test Gain Scores of No Strategy Provided Items by Condition and Student Type.

Research Question 3

Are content knowledge overall post test scores for students in team taught classes different from students in non team taught classes?

The third research question addressed the effects of instruction using embedded strategies vs. no strategies provided items in team taught and vs. non team taught classes classrooms. Measures used to answer this question included gain score from pretest to

post test. Descriptive data for the effect of instruction of recall of items are on Table 12 and Figure 7.

Delayed Post Test Gain Scores

Students in the team taught tutoring condition classes earned a mean gain score of 16.71 (*SD* = 3.20) while the team taught traditional instruction classes earned a mean gain score 9.12 (*SD* = 5.46). The non team taught tutoring condition class earned a mean gain score of 17.52 (*SD* = 5.81) while the non team taught traditional classes earned a mean gain score of 5 (*SD* = 5.30). The effect size was calculated using the above formula. The effect size for the team taught classes was 1.44 and the effect size for the non team class was .92.

Table 12

Total Gain Scores by Class Type

	Condition					
	Tutoring		Traditional		Total	
	M	*SD*	*M*	*SD*	*M*	*SD*
Team Taught	31.87	5.24	20.07	11.18	26.64	10.22
Non Team Taught	33.67	10.02	24.46	9.85	28.33	10.47

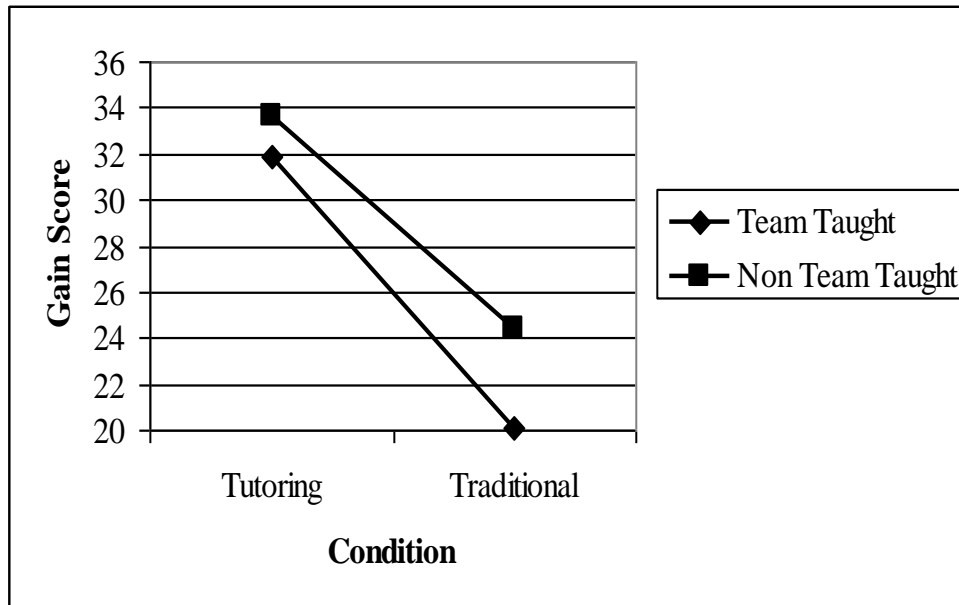*Figure 7.* Delayed Post Test Gain Scores by Class Type

Delayed Post Test Gain Scores by Item Type

The team taught tutoring condition classes earned a mean gain score of 16.71 (*SD* = 3.20) on embedded strategies items and a mean gain score of 15.63 (*SD* = 4.00) on no strategies provided items while the non team taught tutoring condition class earned a mean gain score of 17.52 (*SD* = 5.81) on embedded strategy items and 16.15 (*SD* = 5.30) on the no strategies provided items. The team taught traditional instruction classes earned a mean gain score 9.12 (*SD* = 5.46) on embedded strategies items and 10.94 (*SD* = 7.00) on no strategies provided items while the non team taught traditional instruction class earned a mean gain score 12.03 (*SD* = 5.41) on embedded strategy items and 14.42 (*SD* =

5.63) of the no strategies provided items. Table 13 describes results by item type and class type.

Table 13

Total Gain Scores by Class Type and Item Type

	Condition			
	Tutoring		Traditional	
	M	*SD*	*M*	*SD*
Team Taught				
Embedded Strategies	16.71	3.20	9.12	5.46
No Strategies Provided	15.63	4.00	10.94	7.00
Non Team Taught				
Embedded Strategies	17.52	5.81	12.03	5.41
No Strategies Provided	16.15	5.30	14.42	5.63

Gain scores were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (peer tutoring vs. traditional) by class type (team teaching vs. non team teaching) which yielded a statistically significant main effect for condition, $F(1,184) = 48.624$, $p = .000$ and class type $F(1,184) = 9.002$, $p = .003$. There was a statistically significant interaction effect for by item type, $F(1,184) = 22.139$, $p = .000$. There was also a statistically significant interaction effect for condition

by item type, $F(1,184) = 22.139$, $p = .000$. There were no statistically significant interaction effects for condition by class type, $F(1,184) = 2.832$, $p = .094$.

The follow-up simple effects test for team taught students in the tutoring condition yielded significant effect across item type in favor of the embedded strategy items, $t(1,48) = 2.99$, $p = .035$. This means that the team taught students in the tutoring condition found the embedded strategy items easier to recall. The follow-up simple effects test for team taught students in the traditional condition yielded no statistically significant effect across item type, $t(1,38) = -1.982$, $p = .055$. This means that team taught students in the traditional condition found both types of questions difficult to recall. The follow-up simple effects test for the non team taught students in the tutoring condition yielded no statistically significant effect across item type, $t(1,45) = 1.913$, $p = .062$. This means that these students found it difficult to recall both types of questions, The follow-up simple effects test for the non team taught students in the traditional condition yielded a statistically significant effect across item type favoring the no embedded strategy items, $t(1,51) = -3.432$, $p = .001$. This means that non team taught students in the traditional condition found both the embedded strategy items more difficult to recall. The effect size was calculated for class type using the above formula. The effect size for teamed classes on embedded strategy items was in score was .54. The effect size for teamed classes on no strategies provided items was in score was .85. The effect size for non team taught classes on embedded strategy items was .97. The effect size for non team taught classes on no strategy provided items was .31.

Research Question 4

What are student and teacher attitudes towards strategic mnemonic strategies embedded within a peer tutoring delivery system?

The fourth research question addressed teacher and student opinions about using mnemonic strategies vs. traditional strategies in inclusive social studies classes. Measures used to answer this question included were three surveys: (a) traditional instruction student survey, (b) tutoring condition student survey, and (c) teacher survey.

Student Surveys

The Likert-type questions were coded and entered into SPSS. Clerical reliability was established at 100% by a teacher unfamiliar with the study that matched and verified the accuracy of the data entry into SPSS. Table 14 describes the frequencies for student answers. On the student surveys, the first 3-level Likert typed questions were the same for both conditions. The intent was to determine if students liked social studies and if they studied for tests. When asked if they liked social studies in elementary school, students in the tutoring condition scored a mean of 1.79 (SD = .728) and students in the traditional condition scored a mean of 1.88 (SD=.728) When asked if they liked social studies this year, students in the students in the tutoring condition scored a mean of 2.80 (SD = .428) and students in the traditional condition scored a mean of 2.73 (SD = .496). When asked if they studied before tests, students in the students in the tutoring condition scored a mean of 2.37 (SD = .730) and students in the traditional condition scored a mean of 2.33 (SD = .731).

Table 14

Student Opinions of Social Studies and Studying Habits by Condition

	Condition					
	Tutoring			Traditional		
	1☹	2😐	3☺	1☹	2😐	3☺
	%[a]	%[a]	%[a]	%[b]	%[b]	%[b]
I liked social studies last year						
Special Education students	12	3	8	5	14	1
General Education students	34	23	17	27	31	19
Total	46	26	25	32	45	20
In like social studies this year						
Special Education students	0	0	14	0	7	13
General Education students	1	8	66	2	15	61
Total	1	8	80	2	22	74
I study before tests.						
Special Education students	2	13	8	1	8	10
General Education students	12	20	43	15	27	26
Total	14	33	51	16	35	36

[a]Percentage of 95 students

[b]Percentage of 91 students

Table 15

Student opinion of social studies and studying habits

	Total Sample		
	1☹	2😐	3☺
	% [a]	% [a]	% [a]
I liked social studies last year			
Special Education students	9	8	4
General Education students	31	27	18
Total	40	35	22
In like social studies this year			
Special Education students	0	8	13
General Education students	1	11	63
Total	1	19	79
I study before tests.			
Special Education students	1	11	9
General Education students	13	23	40
Total	14	33	49

[a]N = 186

Students in the tutoring condition were asked an additional nine Likert-type

questions. Table 16 describes the frequency of student responses. When asked if they

liked the mnemonic cards general education students scored a mean of 2.26 (SD = .839)

and students with disabilities scored a mean of 2.26 (SD = .864). When asked if the

mnemonic cards were easy to use general education students scored a mean of 2.75 (SD =

.496) and students with disabilities scored a mean of 2.83 (SD = .491). When asked if the

mnemonic cards helped them learn history content general education students scored a

mean of 2.57 (SD = .688) and students with disabilities scored a mean of 2.52 (SD =

.593). When asked if the mnemonic cards helped them do better on history tests, general education students scored a mean of 2.68 (*SD* = .577) and students with disabilities scored a mean of 2.43 (*SD* = .728).

When asked if they remembered the keyword and pictures on the cards when taking my history tests, general education students scored a mean of 2.57 (*SD* = .688) and students with disabilities scored a mean of 2.52 (*SD* = .730) When asked if similar mnemonic cards could be used in other classes, general education students scored a mean of 2.42 (*SD* = .765) and students with disabilities scored a mean of 2.17 (*SD* =. 887).

Table 15

Percentages of Embedded Strategy Answers

	Tutoring		
	1☹	2😐	3☺
	%[a]	%[a]	%[a]
I liked using the mnemonic cards			
Special Education students	6	5	12
General Education students	18	17	38
Total			
The mnemonic cards were easy to use			
Special Education students	1	2	21
General Education students	1	8	58
Total	2	10	79
The mnemonic cards helped me learn content			
Special Education students	1	9	13
General Education students	8	15	51
Total	9	24	64
The mnemonic cards helped me do better on my tests.			
Special Education students	3	7	13
General Education students	4	15	36
Total	7	22	49

[a]Percentage of 95 students

Initially, the open ended questions were treated as transcripts and coded for similar themes in student answers. These themes were entered into a chart where the researcher recoded the survey responses into SPSS. Some students provided multiple responses. Student answers were coded according to their first answer. For each question, a zero was entered is the student left the question blank, a 20 was entered if the student gave a generic/non specific answer, a 21 if the student wrote they did not know, and a 22

if the answer was negative. The coding sheet (see Appendix KK) listed all the common student responses by individual question. The corresponding number was entered into SPSS. Clerical reliability was established at 90% by a teacher unfamiliar with the study that also coded student responses and then matched and verified the accuracy of the data entry into SPSS. Students in both conditions answered the same six open ended questions. Table 16 displays the frequencies by condition (tutoring vs. traditional) as well as responses from the total sample. In order to be included in the table, at least five students needed to state the same response.

In the first open-ended question, 52 students reported that they liked social studies because of their teacher. Some of the students stated they liked the way the teacher reviewed work and would "break it down for them". Other students reported that they liked the teacher's funny voices and that she didn't yell like last year's teacher. Twenty-four students reported that they liked history because it was fun. Twenty-six students liked history because of the historical content covered this year. Thirteen students provided a generic/non specific answer. For example, some students reported that they liked social studies because it was, "O.K.," "nice," or "it's better." Eleven students reported that they liked history because of the class activities and nine students left the question blank.

In the second open ended question, 147 students left the answer blank when asked what they did not like about social studies. Five students responded that there was too much work and four students provided a generic response. For example, some students

reported, "The class" or "All of it." This section of Table 16 lists all of the student

responses since there were so few in common.

Table 16

Student opinions of social studies

If you like social studies this year, describe here what you like about it.

	Tutoring Condition[a]		Traditional Condition[b]	
	n	%[a]	*n*	%[a]
Teacher	20	21.7	32	39.5
Fun	17	18.5	7	8.6
Topic	16	17.4	10	12.3
Generic	10	10.9	3	3.7
Activities	5	5.4	6	7.4
No Answer	5	5.4	4	4.9

If you do not like social studies this year, describe here what you do not like about it.

	n	%[a]	*n*	%[a]
No Answer	84	91.3	63	77.8
Too much work	4	4.3	1	1.2
Tests and quizzes are hard	1	1.1	1	1.2
Generic	1	1.1	3	3.7
Copy too many notes	1	1.1	2	2.5
Don't Know	1	1.1	1	1.2
Harder than last year	0	0	2	2.5
Don't like the topic	0	0	1	1.2
Too many names and dates	0	0	1	1.2
Don't care about social studies	0	0	2	2.5
Boring	0	0	2	2.5
Confusing	0	0	1	1.2
Too few projects	0	0	1	1.2

[a]N=92 students
[b]N=81 students

In the third open-ended question, students were asked to list which activities make social studies easier to learn. Table 17 describes these results. A total of 41 students reported that games help them learn social studies. Twenty-three students stated that mnemonics made social studies easier to learn. Sixteen students reported that the class activities help them learn social studies while 15 students reported having a teacher made study guide made it easier. Fourteen students reported that hands-on activities helped while 12 students reported that class simulations make learning easier. Twelve students gave a generic answer. For example some students said they did not like history because, "I just don't" or said that, "they didn't care about history." Ten students reported that movies helped, six students reported that doing anything fun helped and five students reported that going over answers to classwork in class helped.

The fourth open-ended question asked what students did to study before tests. Results are described in Table 16. Forty-two students reread the teacher made study guide and 33 students reread class notes. Twenty-seven students gave a generic example such as, "I study" or said that, "I read," or "talking." Twenty-three students left the question blank while 15 students reported that they did not study. Fifteen students reported that their parents quizzed them while ten students reported quizzing themselves.

Table 17

Activities in social studies questions

What activities help make social studies easier for you to learn?

	Tutoring Condition[a]		Traditional Condition[b]	
	n	%[a]	*n*	%[a]
Games	26	28.3	15	18.5
Mnemonics	19	20.7	4	4.9
Study guide	8	8.7	7	8.6
Reviewing	2	2.2	1	1.2
Simulations	6	6.5	6	7.4
Hands on	5	5.4	9	11.1
Generic	5	5.4	7	8.6
Going over answers	4	3.3	1	1.2
Anything fun	4	4.3	2	2.5
Classwork	3	3.3	13	16
Movies	2	2.2	8	9.9

If you study before tests, what do you do?

Read study guide	28	20.4	14	17.3
Review classwork	16	17.4	16	19.8
Don't study	13	14.1	2	2.5
No Answer	11	12	12	14.8
Generic	10	10.9	17	21
Parent quizzes me	5	5.4	10	12.3
Quiz myself	5	5.4	5	6.2

What activities help you memorize history facts?

Mnemonic cards	26	28.3	2	2.5
Games	12	13	12	14.8
No Answer	15	15.8	12	14.8
Flash cards	5	5.5	8	9.9
Read class notes	5	5.4	6	7.4
Read study guides	4	4.3	9	11.1
Doing class activities	3	3.2	5	6.2
Read over and Over	2	2.2	6	7.6
Not Explicit	0	0	8	9.9

Note: [a]N=92 students, [b]N=81 students.

Only students in the tutoring condition answered the last three open-ended questions as they reflected opinions about the mnemonic cards Table 18 describes these results. In the first question, students were asked if they thought the mnemonic cards could be used in other classes, Thirty-two students stated that the cards could be useful in science while 19 students thought they would be useful in math. Fifteen students left the question blank while 13 students thought that they would be useful in English. Six students reported that the cards would be useful in no other class.

In the second question, students were asked what they liked best about using the cards. Twenty-four students liked the keyword/picture while 17 students liked them because they were easy to use. Nine students reported liking them because they worked with a partner while eight students stated that they cards helped them remember content and six students provided no answer.

In the third question, students were asked what they did not like about using the cards. Twenty-three students left the question blank while 15 students stated that they disliked nothing. Thirteen students did not doing them over and over in one class setting, while an additional thirteen students did not like the answers on the front while nine students thought they were boring.

Table 18

Embedded Strategies Questions

	Tutoring Condition[a]	
	n	%[a]
If you think mnemonic cards could be used in other classes, list which classes.		
Science	32	34.8
Math	19	20.7
No Answer	15	15.8
English	13	14.1
No class	6	6.5
Describe what you liked best about using the mnemonic cards		
Keyword/Picture	24	37
Easy to use	17	18.5
Working with a Partner	9	9.8
Helps me to remember	8	8.7
No Answer	6	6.5
Describe what you liked least about using the mnemonic cards.		
No Answer	23	25
Nothing	15	2.2
Answers on front	12	13
Boring	9	9.8
Doing them over and over	7	13

[a]N=92

Teacher Survey

On the teacher surveys, the first six questions were 5-level Likert-typed questions. Teachers circled a 1 if they strongly agreed with the statement, 2 is they agreed, 3 if they were undecided, 4 is they disagreed, and 5 if they strongly agreed. The intent of the questions was to determine teacher opinions about the mnemonic cards and whether they felt it was a worthwhile activity. Only three teachers participated in the treatment condition and therefore their results follow. When asked if mnemonics helped improve instruction, two teachers strongly agreed and one teacher agreed. When asked if they would like to use mnemonics in the future, all three teachers strongly agreed. When asked if mnemonics is better for teaching specific events, people, or vocabulary rather than traditional instruction with terms and definitions, one teacher strongly agreed, and the two other teachers agreed. When asked when compared with mnemonic instruction with terms and definitions, traditional instruction is better for teaching specific events, people, or vocabulary, two teachers strongly agreed, and the other teacher was undecided. When asked if students were on task when using the mnemonic cards, all three teachers answered agreed and when asked if students were actively engaged when using the mnemonics, all of the teachers agreed.

The first open-ended question asked teachers which type of instruction they preferred for teaching targeted factual information. All three teachers reported liking the mnemonics. One teacher reported liking the mnemonics because she felt they were helpful for students to grasp information that otherwise becomes rote memorization. Another teacher liked the cards because she felt that students were actively learning the

content. She felt that few students benefitted from writing the word and looking up a definition. The third teacher liked the cards because of the pictures. She felt the students remembered the keyword and the picture better than a written definition.

When asked in the second question, which type of instruction seemed easier for the delivery of specific factual information, one teacher reported that the mnemonic cards required less teacher guidance or direct instruction. Another teacher preferred the cards because it required no writing for students. The third teacher preferred them because she thought it was easier to take the cards out and provide time to practice rather than rewriting definitions over and over. All three teachers said that what they enjoyed most about the mnemonics was seeing the children learn the information by remembering the keyword and the interactive picture. These teachers reported finding it difficult with behavior management. The students often raced with other dyads and neglected to read the scripts on the back of the cards.

The teachers were also asked what their students thought of the cards. One teacher reported that the students "felt insulted" by the answers on the front of the cards. She said the students felt that the answers lessoned the challenge and overall impact or effectiveness of the cards. Another teacher later in the survey reported the similar information, but for this question, stated that the students like pairing up and using the keywords. They challenged themselves and wanted to listen first so they could prove they knew every answer before reading it to their peer. The third teacher just reported that the students loved the activity.

All three teachers stated that the students appeared to recall more facts with the mnemonic cards than their students receiving traditional instruction. One teacher stated that she was concerned that her students who used the cards lost some contextual understanding. They other two teachers reported that the students who used the mnemonic cards recalled more facts than the students did in the traditional condition. Nothing was mentioned about context.

In response to the seventh question about what the teachers enjoyed best about traditional instruction, one of the teachers said it was more comfortable but was frustrated because she wanted to incorporate the mnemonic cards into her other classes. Another teacher said that in traditional instruction, there was a typically a worksheet that she could grade to measure student learning. She said was not as comfortable at first with the students pairing off and not really knowing if they were learning. The third teacher also stated that in the traditional instruction, she was used to having a grade or some form of measurement of learning.

All three teachers stated that what they liked best about using the mnemonics was the speed that they discovered their students grasped the simple facts and made the connection between the keyword/ interactive picture and the answer. One teacher liked the fact that students were coming up to her proud that they knew all of the answers. She also stated that all of her students were engaged at the same time. The nature of the activity would not allow one student to complete all of the work. Both students needed to be working at the same time. Some of her students, she continued complained when their

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partner was not participating as well as they wanted them to. Her students, she said, really wanted to learn the information.

The teachers in the traditional condition were familiar with the mnemonic cards and based their answers on informal discussions with teachers who used the cards as well as their experiences teaching students with special needs. One teacher reported the difficulty her students with disabilities were having with memorizing facts especially in the test-driven culture in which they are learning. She is concerned that traditionally, students have been told to just memorize facts and they do not have the strategies or skills to do it. Consequently, she reports these students will never be able to use these facts to solve problems or perform higher level thinking skills. She also reported that she would like to use the mnemonic cards in the future.

Supplemental Analyses

Two sets of supplemental analyses were performed using the data from each section of the posttest. The first set is based on sections of the posttest administered during training but after teacher finished teaching the corresponding unit. The second set is based on student performance at then end of the intervention on the posttest.

Unit Tests Administered During Training

Measures used included Industrialization, Progressive, and Imperialism mean scores. Descriptive data for the effect of instruction of recall for total unit scores are on Table 19.

Table 19

Unit Test Scores of Each Individual Unit of Study Given During Training

	Tutoring			Condition Traditional		
	n	*M*	*SD*	*n*	*M*	*SD*
Industrialization Items	95	18.19	2.33	91	14.88	4.59
Embedded Strategies Items[a]	95	9.44	1.12	91	7.09	2.56
No Strategies Provided Items[a]	95	8.74	1.50	91	7.78	2.32
Progressive Items	95	18.19	2.57	91	15.45	3.49
Embedded Strategies Items[a]	95	9.29	1.58	91	7.62	1.97
No Strategies Provided Items[a]	95	8.89	1.41	91	7.82	1.86
Imperialism Items	95	18.38	2.60	91	15.78	4.85
Embedded Strategies Items[a]	95	9.42	1.24	91	7.79	2.06
No Strategies Provided Items[a]	95	8.96	1.61	91	7.96	2.06

[a]$n = 10$

Industrialization Unit

In the Industrialization unit, the tutoring condition earned a mean score of 18.19 ($SD = 2.33$) and the traditional condition earned a mean score of 14.88 ($SD = 4.59$). Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies). This yielded a statistically significant main effect for condition. $F(1,182) = 35.120$, $p = .000$. Main effect for item type were not statistically

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significant, $F(1, 182) = .446$, $p = .522$. There was also a statistically significant interaction between item type and condition $F(1,182) = 37.401$, p =.000. There was no statistically significant interaction effects for item type by student type $F(1,182) = 1.385$, $p = .241$, nor item type by condition by student type $F(1,182) = 1.967$, $p = .162$.

The follow up simple effects test for the tutoring condition yielded a statistically significant effect in favor of the embedded strategy questions, $t(1,94) = -5.288$, $p = .000$. This means that students in the tutoring condition found the embedded strategy items easier to recall. The follow up simple effects test for the traditional condition also yielded a statistically significant effect, $t(1,90) = 3.917$, $p = .000$. However, this time the effect was in favor of the no embedded strategy questions. This means that students in the traditional condition found the embedded strategy items more difficult to recall. The effect size was calculated using the above formula. The effect size was .95.

Progressive Unit

In the Progressive unit, the general education students in the tutoring condition earned a mean score of 18.58 ($SD = 2.12$) and in the traditional condition earned a mean score of 16.00 ($SD = 3.26$). The students with disabilities in the tutoring condition earned a mean score of 16.96 ($SD = 3.41$) and in the traditional condition earned a mean gain score of 13.47 ($SD = 3.32$).

Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies) which yielded statistically significant main effect for condition, $F(1,184) = 38.026$, $p = .000$ and for item type, $F(1,184) = .718$,

$p = .039$. There was a statistically significant interaction effect for condition by item type, $F(1,182) = 6.273$, $p = .013$.

The follow up simple effects test for the tutoring condition yielded a statistically significant effect in favor of the embedded strategy items, $t(1,95) = -2.510$, $p = .014$. This means that the students in the tutoring condition found the embedded strategy items easier to recall. The follow up simple effects test for the traditional condition yielded no statistically significant effect for item type, $t(1,95) = 1.109$, $p = .270$. This means that the students in the traditional condition found both items difficult to recall. The effect size was calculated using the above formula. The effect size was .90.

Imperialism Unit

In the Imperialism unit, the tutoring condition earned a mean score of 9.42 ($SD = 1.24$) on embedded strategy items and a mean score of 8.96 ($SD = 1.61$) on no strategies provided items while the traditional condition earned a mean score of 7.79 ($SD = 2.06$) on embedded strategies items and 7.96 ($SD = 2.06$) of the no strategies provided items.

Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies). This yielded a statistically significant main effect for condition, $F(1,182) = 29.764$, p = .000. There was no statistically significant main effect for item type, $F(1,182) = 2.006$, $p = .158$. There was a statistically significant interaction between item type and condition $F(1,182) = 10.338$, $p = .002$.

The follow up simple effects test for students in the tutoring condition yielded a statistically significant effect in favor of the embedded strategy items, $t(1,95) = -3.595$, p

= .001.. This means that the students in the tutoring condition found the embedded

strategy items easier to recall. The follow up simple effects test for students in the

traditional condition yielded no statistically significant effect for item type, $t(1,90) =$

1.169, p = .245. This means that the students in the tutoring condition found both item

types difficult to recall. The effect size was calculated using the above formula. The

effect size was .69.

Delayed Post Test by Individual Unit

Post Test Measures used included Industrialization, Progressive, and Imperialism

gain scores. Descriptive data for the effect of instruction of recall of items are on Table

20.

Table 20

Delayed Post Test Scores by Unit

	Condition			
	Peer tutoring		Traditional	
	M	*SD*	*M*	*SD*
Industrialization	17.69	2.65	14.06	3.97
Embedded strategies items[a]	8.24	1.84	7.35	2.11
No strategies provided items[a]	9.45	1.09	6.71	2.28
Progressives	17.80	2.89	14.21	4.81
Embedded strategies items[a]	9.29	1.61	6.98	2.60
No strategies provided items[a]	8.50	1.59	7.23	2.62
Imperialism	18.10	2.71	13.91	5.43
Embedded strategies items[a]	9.33	1.32	6.72	2.97
No strategies provided items[a]	8.76	1.55	7.18	2.72

Industrialization Unit

The tutoring condition earned a mean score of 8.24 (*SD* = 1.84) on the embedded strategy items and a mean score of 9.45 (*SD* = 1.09) on no strategy provided items while the traditional condition earned a mean score of 7.35 (*SD* = 2.11) on embedded strategy items and 6.71 (*SD* = 2.28) on the no strategy provided items. Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies) which yielded a statistically significant effect for condition $F(1,182) = 54.044$,

$p = .000$, item type $F(1,182) = 5.353$, $p = .022$ and an interaction effect for item type by condition, $F(1,182) = 54.643$, $p = .000$ The effect size was calculated with the above formula.

The follow up simple effects test across item type for the tutoring condition yielded a statistically significant effect in favor of the embedded strategy items, $t(1,95) = -8.103$, $p = .000$. This means that the students in the tutoring condition found the embedded strategy items easier to recall. The follow up simple effects test for students in the traditional condition yielded s statistically significant effect for the no strategy provided items, $t(1,90) = 3.219$, $p = .002$. This means that the students in the traditional condition found the embedded strategy items more difficult to recall. The effect size was for embedded strategies was .43 and for non embedded strategies, the effect size was .81.

Progressive Unit

In the Progressive unit, students in the tutoring condition earned a mean score of 9.29 ($SD = 1.61$) on embedded strategy items and a mean score of 8.50 ($SD = 1.59$) on no strategy provided items while the traditional condition earned a mean score of 6.98 ($SD = 2.60$) on embedded strategy items and 7.23 ($SD = 2.62$) of the no strategy provided items.

Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies) which yielded a statistically significant effect for condition $F(1,182) = 38.078$, $p = .000$. It also yielded a statistically Significant main effect for item type $F(1,182) = 4.695$, $p = .032$ and an interaction effect for item type by condition, $F(1,182) = 16.42$, $p = .000$.

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The follow up simple effects test across item type for students in the tutoring condition yielded a statistically significant effect in favor of the embedded strategy questions, $t(1,95) = 5.659$, $p = .000$. This means that the students in the tutoring condition found the embedded strategy items were easier to recall. The follow up simple effects test for students in the traditional condition yielded no statistically significant effect for item type, $t(1,90) = -1.133$, $p = .260$. This means that students in the traditional condition found both item types difficult to recall. The effect size was calculated with the above formula. The effect size was for the embedded strategy items was 1.09 and for the no strategy provided items, the effect size was .60.

Imperialism Unit

In the Imperialism unit, the tutoring condition earned a mean score of 9.33 ($SD = 1.32$) on the embedded strategy items and a mean score of 8.76 ($SD = 1.55$) on no strategy provided items while the traditional condition earned a mean score of 6.72 ($SD = 2.97$) on embedded strategy items and 7.18 ($SD = 2.72$) on the no strategy provided items. Data were entered into an analysis of variance (ANOVA) with repeated measures analysis on the recall factor for condition (tutoring vs. traditional) by item type (embedded strategies vs. no embedded strategies) which yielded a statistically significant effect for condition $F(1,182) = 44.883$, $p = .000$. There was no statistically significant effect for item type $F(1,182) = .229$, $p = .633$. There was a statistically significant interaction effect for item type by condition, $F(1,182) = 21.300$, $p = .000$.

The follow up simple effects test for students in the tutoring condition yielded a statistically significant effect in favor of the embedded strategy questions, $t(1,95) =$

4.310, $p = .000$. This means that the students in the tutoring condition found the

embedded strategy questions easier to recall.

The follow up simple effects test for students in the traditional condition yielded a

statistically significant effect in favor of the no embedded strategy questions, $t(1,90) =$

2.539, $p = .013$.This means that the students in the traditional condition found the

embedded strategy questions more difficult to recall. The effect size was calculated with

the above formula. The effect size was for embedded strategies was 1.21 and for non

embedded strategies, the effect size was .74. Table 21 describes the data from the unit

tests administered during training and from the delayed posttest. Data is side by side for

comparison.

Table 21

Unit Test Scores Comparing During Training Sessions and Delayed Post Test Session

	Condition							
	Peer tutoring				Traditional			
	During Training		Delayed Post Test		During Training		Delayed Post Test	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Industrialization	18.19	2.33	17.69	2.65	14.88	4.59	14.06	3.97
Embedded strategies items[a]	9.44	1.12	8.24	1.84	7.09	2.56	7.35	2.11
No strategies provided items[a]	8.74	1.50	9.45	1.09	7.78	2.32	6.71	2.28
Progressives	18.19	2.57	17.80	2.89	15.45	3.49	14.21	4.81
Embedded strategies items[a]	9.29	1.58	9.29	1.61	7.62	1.97	6.98	2.60
No strategies provided items[a]	8.89	1.41	8.50	1.59	7.82	1.86	7.23	2.62
Imperialism	18.38	2.60	18.10	2.71	15.78	4.85	13.91	5.43
Embedded strategies items[a]	9.42	1.24	9.33	1.32	7.79	2.06	6.72	2.97
No strategies provided items[a]	8.96	1.61	8.76	1.55	7.96	2.06	7.18	2.72

[a]N=10

5. Discussion

This study examined the potential efficacy of supplemental social studies materials providing differentiated curriculum enhancements for students with and without disabilities in seventh grade inclusive social studies classrooms. The curriculum enhancements were keyword mnemonics with interactive pictures delivered though classwide peer tutoring. Overall findings revealed, (a) students in the tutoring condition statistically outperformed students in the comparison condition on gain scores on the overall delayed recall measure; (b) students in the tutoring condition performed statistically higher on the embedded strategy items than on the no strategy provided items. However, students in the traditional condition statistically performed higher on the no strategy provided items than the embedded strategy items; (c) Students with disabilities in the tutoring condition consistently outperformed students with disabilities in the traditional condition, (d) Students in non team taught classes consistently outperformed students in team taught classes according to condition. Each of these findings is discussed separately by research question followed by a discussion of the student and teacher survey results. Finally, educational implications, limitations of this study and recommendations for future research are discussed.

Finding 1

In the present study, students in the tutoring condition received instruction on how to use reciprocal peer tutoring, in that students exchanged tutor and tutees roles throughout tutoring. In addition, students learned how to use the mnemonic keyword strategy to facilitate recall for important history facts and concepts. For example, to help students remember that John Rockefeller was a businessman who controlled the oil business, students were asked to remember a key word, "rock." Students then examined an interacted in a picture of a rock with oil pouring over it. The other side of the card contained the peer tutoring directions and listed the question, answer, directions if the students answers the question correctly or incorrectly, and the mnemonic strategy students should use to remember the which industry John Rockefeller controlled. Question: "Who was John Rockefeller?" Answer: "Businessman that controlled the oil business." Directions: "If correct, go onto the next card. If wrong say, 'The keyword for Rockefeller is rock.'" and the Strategy: "To help you remember that the Rockefeller was a businessman who controlled the oil business, remember this picture of a rock with oil on top of it." Students used the strategies four times during a two to three week unit. After the teacher completing instruction for each unit, students were administered a unit test. After all three units were completed, students were administered a delayed post test. This delayed recall test covered content that was presented over a two and half month instructional period.

Students in the tutoring condition statistically outperformed students in the comparison condition on gain scores on the overall delayed recall measure. This means

that in this study the seventh graders in inclusive classes that used embedded strategies four times each unit for 2.5 months of instruction, statistically outperformed the comparison students who learned the same content, but through traditional instruction.

This is very important because students are required to learn and retain content in social studies classes. Annually, students are required to take end of course, high stakes tests. Students must memorize large amounts of content information over an approximate 10 month period. Since students in this study were able to recall information over an extended period, the mnemonic strategies may be beneficial when preparing students for these high stake tests.

Results of this study replicate and extend previous research in classwide peer tutoring. For example, Saenz, Fuchs, and Fuchs (2005) used classwide peer tutoring with 132 English language learners (ELL) in grades three through six with students with disabilities, low-achieving students, average achieving students, and high-achieving students, to improve fluency and reading comprehension. The sessions were completed three times a week for 15 weeks. The results of the current study replicates the results of the Saenz, Fuchs, and Fuchs (2005) study in that students in the treatment condition who used classwide peer tutoring outperformed students who did not on a reading comprehension recall test. The current study extends the ELL study by using general education students in inclusive settings to recall history facts. The current study also extends this study by changing the type of materials. Students in the Saenz, Fuchs, and Fuchs (2005) study read passages to each other and then asked questions. In the current

study, students asked a question and if their partner answered incorrectly, read an embedded strategy.

In another study, Mastropieri et al., (2001) also used classwide peer tutoring to improve reading comprehension. Participants included 24 middle school students with disabilities. Students used the materials daily for 5 weeks. Students in the tutoring condition outperformed the students on the traditional condition on reading comprehension. The current study replicates the results because there was statistical significance for reading comprehension for the treatment condition that used classwide peer tutoring. The current study also extends this study by using general education students in inclusive settings to recall history facts and by changing the type of materials. In the Mastropieri et al., (2001) study the students read passages to each other and then asked questions. In the current study, students asked a question and listened for a specific answer. If their partner answered incorrectly, they read the corresponding embedded strategy and only continued when their partner answers correctly.

The results of the current study also replicate results from many studies using mnemonic materials. For example, Scruggs, Mastropieri, Brigham, and Sullivan (1992) taught 39 seventh and eighth graders with learning disabilities eighteenth century war battles using a keyword and corresponding picture for each battle. Students were instructed and assessed individually outside of the classroom. Results indicated that students in the treatment condition significantly outperformed students in the control condition. The results of the current student replicate these findings. The current study also extends this study by asking students to recall information on a delayed post test

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rather than immediately after instruction. It also extends this study in the way the mnemonic information was delivered to the students. In Scruggs, Mastropieri, Brigham, and Sullivan (1992) study, the researcher delivered the mnemonic information in a one-on-one setting. In the current study, students delivered the mnemonic information to their peers inside an inclusive classroom.

In another study that incorporated the use of mnemonics, Mastropieri, Scruggs, Bakken, and Brigham (1994) taught eight students with disabilities 20 U.S. state names and their corresponding capital over a 4 to 5 week period and measured student performance using a single subject design. Students used a card with a key word for the state and an interactive picture. Students scored an average 94% correct on a multiple-choice test. The current study replicates the increased recall but extends this study in many ways. First, the current study analyzed results by treatment. In addition, the current study used a control treatment for comparison. It also extends the delivery of the mnemonic materials. In the Mastropieri (1994) study, the researcher delivered the mnemonic information. In the current study, students delivered the mnemonic information to their peers.

Brigham, Scruggs, and Mastropieri (1995) also used mnemonics to teach the details of various American Revolution battles and their corresponding location 72 middle school students with disabilities. Students participated individually outside of the classroom. Results indicated that students who viewed maps with keyword mnemonic representations and the elaborative maps recalled significantly more locations than students did in the control conditions. Students who used the elaborative maps recalled

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more details about the battles than the students did in the mnemonic and control

conditions. The current study replicates these findings. Students in the current study

increased their recall of facts. The current study extends this study by taking place in an

inclusive setting with general education students. It also extends the delivery of the

mnemonic materials. In the Brigham, Scruggs, and Mastropieri (1995) the researcher

delivered the mnemonic information. In the current study, students delivered the

mnemonic information to their peers.

Mastropieri and Scruggs (1989) taught 17 elementary students with disabilities

Indiana using mnemonic with reconstructive elaborations in five sessions. Classrooms

were assigned to treatments (mnemonics vs. traditional) and had the teachers deliver the

mnemonic information on the overhead machine. Students were then administered an

immediate recall test and a delayed recall test. Results indicated that students recalled

more historical information under the mnemonic condition than the traditional condition.

The current study replicated the Mastropieri and Scruggs (1989) study by using two

treatments and using mnemonic strategies. It also extends the delivery of the mnemonic

materials. In the Mastropieri and Scruggs (1989) study, the teacher delivered the

mnemonic information. In the current study, students delivered the mnemonic

information to their peers. In addition, the current study extended this study by

combining general education and students with disabilities in an inclusive setting.

Mastropieri, Sweda, and Scruggs (2000) taught 26 fourth graders in an inclusive

classroom, facts associated with the settlement of the Chesapeake Bay. The teacher

created illustrations to accompany a short reading passage. For example, to help students

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learn the definition of a "charter," the teacher drew a stick figure reading rules for a country on chart paper. The students with special needs average 75% correct on mnemonically taught items while only 36.7% on non-mnemonic content. The current study replicates the increased recall of facts findings and also replicates the setting. It also extends the study by adapting the way the mnemonic materials were delivered to students. In the Mastropieri, Sweda, and Scruggs (2000) study the teacher delivered the mnemonic information. In the current study, students delivered the mnemonic information to their peers.

Another study that used mnemonic instruction in an inclusive classroom was the Uberti, Scruggs, and Mastropieri (2003) study. The researchers taught 74 students in third grade with and with disabilities vocabulary associated with the book *June 29, 1999*. Students in the keyword condition scored the highest recall on the post test followed by the definition condition and the picture condition respectively. While the current study on used two conditions, the students in the tutoring condition that used the mnemonic cards outperformed the students in the comparison condition as in the Uberti, Scruggs, and Mastropieri (2003) study. The design of the two studies is also similar. Both studies used a pre/post design in an inclusive setting with general education students and students with disabilities. However, the current study extends the Uberti, Scruggs, and Mastropieri (2003) study by changing how the mnemonic instruction is delivered to students. In the Uberti, Scruggs, and Mastropieri (2003) study the teacher delivered the mnemonic information. In the current study, students delivered the mnemonic information to their peers.

Research is lacking however, on studies that incorporate mnemonic strategy instruction in peer tutoring formats. The closest study is the Mastropieri, Scruggs, and Graetz (2005) study. These researchers taught 39 tenth grade students chemistry using mnemonics and classwide peer tutoring. The intervention lasted 9 weeks and included a pretest, training, posttest, and final exams. Students used keyword mnemonics in a peer tutoring format. Students in the treatment condition outperformed their peers in the traditional condition on the post test. The current study replicates this study's design. The current study also used a pre and post test. The current study also replicates the Mastropieri, Scruggs, and Graetz (2005) study by taking place in an inclusive classroom a combination of general education and special students using classwide peer tutoring. The current study extends this research by using seventh graders learning historical content.

Finding 2

Another finding from this study was a significant interaction effect between condition and item type on the gain scores on the overall delayed recall measure. This means that the students in the tutoring condition performed statistically higher on the embedded strategy items than on the no strategy provided items. Students in the traditional condition statistically performed higher on the no strategy provided items than the embedded strategy items. The traditional condition had less recall on the embedded strategies items. Because the students in the traditional condition struggled to recall more of the embedded strategy items, these items appear to be harder to learn. Therefore, the use of these embedded strategies differentially facilitated recall in the tutoring condition.

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Students were able to recall more of these items than the no strategy provided items on the delayed recall measure.

This replicates the Mastropieri, Scruggs, and Graetz (2005) chemistry study. In this study, researchers used two types of questions, fact vs. comprehension. Students scored higher on the factual items then on items requiring comprehension. The current study replicates this study by using two types of questions, embedded strategy items and no strategy provided items. Results were congruent in that students recalled more of one type of question than did another.

In the Mastropieri, Scruggs, and Whedon (1997) study, 19 students with disabilities were taught the order of the first 32 U.S. presidents during a six week period. Students participated in both conditions. The first 16 presidents were taught using mnemonics followed by review. The second 16 presidents were taught using traditional methods. Two weeks after instruction ended, students were administered a post test. Results indicated that students could recall a president's name and number placement more easily than a president taught using traditional instruction. These results are replicated in the current study. Students were taught information both mnemonically and traditionally and took a delayed post test. Students in the tutoring condition recalled the content more easily that was taught using the mnemonic strategies. The current study extends this research by changing the sample and setting. In this study, the students all had disabilities while in the current study, students with and without disabilities participated in an inclusive setting. It also extended how the mnemonic strategies were delivered to students. In the Mastropieri, Scruggs, and Whedon (1997) study the teacher

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delivered the mnemonic information. In the current study, students delivered the mnemonic information to their peers.

Another finding from this study was that there was no statistically significant main effect for student type. This means that students regardless of ability did not perform differently on the delayed post test recall measure independent of condition. The differences therefore in performance were due condition rather than student type. It appears that the students with disabilities in the tutoring condition performed similar to students without disabilities in the tutoring condition. Conversely, students without disabilities in the traditional condition consistently out performed the students with disabilities on both item types.

This replicated results from the Uberti, Scruggs, and Mastropieri (2003) study described above. In that study, students with disabilities in the keyword mnemonic condition significantly outperformed students with disabilities in the picture and definition condition. Another replication of results is that mnemonics helped students with disabilities perform closer to matching that the general education students. In the other condition, as in the current study, the discrepancy was much wider.

The results of the current study also replicate the Mastropieri, Sweda, and Scruggs (2000) study described above. Students with and without disabilities recalled more of the content taught with mnemonics. The discrepancy between the students with and without disabilities on recall of mnemonically taught information was only 13 percentage points while the discrepancy between students on the traditionally taught information was 48 percentage points.

Mastropieri, Scruggs, and Graetz (2005) also found that the students with disabilities in the treatment condition approached the mean of the general students in the traditional condition. In the current study, results are similar. The students with disabilities in the traditional condition outperformed the students without disabilities in the traditional condition on both the embedded strategy items and the no strategy provided items. The results of these two studies demonstrate that the use if mnemonic instruction can bring the achievement of students with special needs close to or surpass that of the general education students.

Finding 3

Another finding from this study was a significant main effect for class type. Regardless of treatment condition, one class type outperformed the other class type. Students in the non team taught classes out performed students in the team taught classes across condition. This is probably due to the large numbers of students without disabilities in the non team taught classes. In fact, the number if students with disabilities in these classes were low, ranging from one to two students across the four classes in this study. Students without disabilities typically outperform students with disabilities in academic classes. Conversely, since team taught classes included significantly more students with disabilities who typically perform lower, team taught class performances were significantly lower overall. This may be attributable to the difficulties encountered by students with disabilities learning and recalling content area information. Interestingly, the mean performances of the students with and without disabilities were almost virtually

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identical on the embedded strategy items. This is further support of the use of mnemonic strategies with these students.

Research is limited in regards to team teaching. Most studies are characteristic studies of team teaching or report findings of student performance in relation to the effectiveness of having a team taught class. In one study, however, Mastropieri et al., (2006) used 13 eighth grade science classes, five of which were team taught and eight were non team taught. The researchers used classwide peer tutoring with differentiated science activities. Students worked one on one using the hands-on materials for 12 weeks. Results on the delayed post test indicated that students using peer tutoring with the differentiated activities recalled more content then when taught more traditionally without the class wide peer tutoring. The current study replicates the results because while the results were not separated by class type, overall results indicated that the students without disabilities outperformed the students with disabilities. The current study extends this study by using history facts and by changing the type of materials. In the Mastropieri et al., (2006) study the students completed activities together rather than quizzed each other. In the current study, students asked a question and listened for a specific answer. If their partner answered incorrectly, they read the corresponding embedded strategy and only continue when their partner answered correctly.

Surveys

Another finding from this study is that when students were asked about whether they liked history last year, the majority of students said that they did not like social studies. However, when asked about social studies this year, the majority of student liked

social studies because they liked their teachers. They also reported that they like to play games or have fun during class activities. This may explain the discrepancy between last year and this year. If seventh grade students like their teacher and deem activities fun, it seems they like the class.

Few studies could be located that surveyed elementary, middle or high school students on their opinions of social studies class. In 2005, Zhao and Hoge surveyed students in three counties in Georgia with grades K-5 (sample size not provided). The purpose of the survey was to determine how students perceived social studies and to determine how much they knew about some basic social studies content. When asked what their favorite subject was, these students responded reading, math, or science because it was fun and hands-on. Although students in the current study were not asked their favorite subject, they did state that they liked social studies because it was fun and hands-on.

An important finding from the student surveys is that students reported that they did not study for tests; they relied on classwork. If they did study for tests, most students reported rereading their notes or teacher made study guides and a few students reported that they, "just studied." Very few students were able to report a specific strategy or technique they used to study. No research could be located that supports or refutes these findings.

Another important finding from the tutoring condition student surveys indicated that the majority of students in the tutoring condition enjoyed using the materials. The liked working with their peers and that the mnemonic cards were fun and helped them

"remember the information." They also reported that they would like to use them in other subjects, especially in science.

The current study replicates results from the Mastropieri and Scruggs (1989) study described above. When they survey students, students reported that they enjoyed using the materials especially the pictures. They also reported that the pictures helped learn more information. In addition, when asked if they would like to use the mnemonics in other classes, students responded positively and mentioned science, language, math, heath, and reading.

Survey results from the current study also replicate results from the Fontana, Scruggs, and Mastropieri (2007) study. In this study, the researchers taught 50 students in inclusive high school classrooms, world history using mnemonics. Teachers taught students using two methods, mnemonics and traditional instruction. While in this study there was no statistically significant difference between treatments on recall, the current study replicates the student survey results. Students did report liking the activity. The students believed they learned more using the mnemonics than with the traditional instruction. They also would like to use the mnemonics in English, foreign language, science, and math classes. The current study extended this research to using a larger but younger sample. It also extends the delivery of the mnemonic materials. In the Fontana, Scruggs, and Mastropieri (2007) the teacher delivered the mnemonic instruction. In the current study, students used classwide peer tutoring to deliver the mnemonic instruction to each other. Student survey results also replicate the Mastropieri, Scruggs, and Graetz

(2005) study. In this study, students reported liking to work with their partners and felt the extra practice was beneficial.

An important finding from the teacher surveys was that all the teachers believed that the embedded strategy training helped improve instruction. They reported favoring the use of the embedded strategy materials for teaching targeted information because it provided a strategy for students to learn how to memorize rote information. In addition, teachers reported that students learned the targeted information at a faster pace than their students did in the traditional condition. Teachers also reported liking the activity for students with disabilities because it helped them learn the content without requiring any writing of definitions or keeping tack of definition pages. It also kept these students actively engaged an on task during the activity.

Teacher survey results also replicate the Mastropieri, Scruggs, and Graetz (2005) study. In this study, the teacher reported liking the tutoring and created more enthusiasm for learning in their students. In the Mastropieri and Scruggs (1989) study described above, teachers reported that they had enjoyed using the materials. The also stated that the materials were convenient and easy to use; that they motivated their students and helped students learn more content material than when using traditional methods.

When comparing results from the unit tests administered during training with the results on the overall delayed recall measure unit tests, the same pattern of results emerged. In each unit, (Industrialization, Progressive, and Imperialism) students in the tutoring condition statistically outperformed students in the comparison condition. This means that they students that used embedded strategies outperformed the comparison

students who did not receive these embedded strategies but rather received traditional instruction. Students in the tutoring condition retained the targeted information and could recall the information more easily than the students did in the traditional condition.

Educational Implications

Most schools require students to pass standardized end of course tests in social studies. These tests tend to be fact based and rely on students to memorize large amounts of content information. If other students report as in this study that they do not study before tests, teachers need strategies they can use in class to help students memorize large amounts of content information. The embedded strategies used in this study helped these students learn three units of content and recall the content up to three months after instruction.

More and more students are receiving their education in inclusive setting with students of varying abilities. Usually, a general education teacher is responsible for the delivery of instruction and must design lessons to meet the needs of students that learn content at varied paces. These teachers may have little to no training in strategies to help students with special needs. The materials used in this study helped students regardless of whether they had a disability. Therefore, these activities can be used with all students in inclusive settings.

Limitations

There are possible limitations to the current study related to the study's sample. Students were not randomly assigned. Classes were already pre-formed and therefore needed to be assigned to condition. The study was limited to eight classrooms and had

unequal representation of teachers across treatments. It is unclear whether the two team taught classes included in the traditional condition that were taught by a teacher who had no access to the mnemonic strategies would have benefitted from the embedded strategy training paired with classwide peer tutoring. In addition, there were four students in these classes with emotional disabilities and four with other health impairments. The other class samples included no students with emotional disabilities and only two students with other health impairments. It is unclear whether the these disabilities

Another limitation of the study is related to the measures. This study included no standardized history test performance. All measures reported are written by the researcher. It is unclear whether the use of a standardized test to measure recall would produce different results.

Recommendations for Future Research

In order to fully understand the effectiveness of using embedded strategies paired with classwide peer tutoring, future research should develop more materials to cover an entire unit of study. It may be beneficial to compare student performance of researcher-designed measure with school designed content tests. The link between the uses of mnemonics with student grade improvement may help maintain the sustainability of teacher use. Future studies should also explore the use of student created mnemonics. Having students create the mnemonic would teach students how to come up with a keyword, interactive picture, and a script to help them memorize the content. Then, researchers could examine whether students would transfer this skill to other classes.

Students in this study reported that they did not studying for tests. It is unclear whether they do not how to study, not having time, or even not caring. It would be interesting to find out if when students were given their own sets of mnemonic cards they would use them to prepare for tests. This might answer the question of whether taught a strategy and given the materials, students who previously did not know how to study would prepare for tests. This is important because as students progress through the educational system, it will become more difficult to achieve if they only rely on classwork without studying on their own. Future studies should address these questions and examine the long-term implications of not studying.

Summary

There is relatively little intervention research in social studies inclusive classrooms. Students with special needs are increasingly receiving their social studies instruction in inclusive classrooms with general education teachers as the primary provider of instruction. Since these classes contain students with varying abilities teachers need beneficial strategies that can be used simultaneously with every student. The current study demonstrated the effectiveness of using the embedded strategies instruction in a peer tutoring format for inclusive classrooms. Students using the materials outperformed the other students and at the same time, enjoyed themselves.

Appendix A

United States History II Standards of Learning (SOLs)

USII.1 The student will demonstrate skills for historical and geographical analysis, including the ability to
a) analyze and interpret primary and secondary source documents to increase understanding of events and life in United States history from 1877 to the present;
b) make connections between past and present;
c) sequence events in United States history from 1877 to the present;
d) interpret ideas and events from different historical perspectives;
e) evaluate and debate issues orally and in writing;
f) analyze and interpret maps that include major physical features;
g) use parallels of latitude and meridians of longitude to describe hemispheric location;
h) interpret patriotic slogans and excerpts from notable speeches and documents.

Geography
USII.2 The student will use maps, globes, photographs, pictures, and tables for
a) explaining how physical features and climate influenced the movement of people westward;
b) explaining relationships among natural resources, transportation, and industrial development after 1877;
c) locating the 50 states and the cities most significant to the historical development of the United States.

Reshaping the Nation and the Emergence of Modern America: 1877 to the Early 1900s
USII.3 The student will demonstrate knowledge of how life changed after the Civil War by
a) identifying the reasons for westward expansion;
b) explaining the reasons for the increase in immigration, growth of cities, new inventions, and challenges arising from this expansion;
c) describing racial segregation, the rise of "Jim Crow," and other constraints faced by African Americans in the post-Reconstruction South;
d) explaining the rise of big business, the growth of industry, and life on American farms;
e) describing the impact of the Progressive Movement on child labor, working conditions, the rise of organized labor, women's suffrage, and the temperance movement.

Turmoil and Change: 1890s to 1945
USII.4 The student will demonstrate knowledge of the changing role of the United States from the late nineteenth century through World War I by

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a) explaining the reasons for and results of the Spanish American War;
b) explaining the reasons for the United States' involvement in World War I and its leadership role at the conclusion of the war.

USII.5   The student will demonstrate knowledge of the social, economic, and technological changes of the early twentieth century by
a) explaining how developments in transportation (including the use of the automobile), communication, and rural electrification changed American life;
b) describing the social changes that took place, including prohibition, and the Great Migration north;
c) examining art, literature, and music from the 1920s and 1930s, emphasizing Langston Hughes, Duke Ellington, and Georgia O'Keeffe and including the Harlem Renaissance;
d) identifying the causes of the Great Depression, its impact on Americans, and the major features of Franklin D. Roosevelt's New Deal.

USII.6   The student will demonstrate knowledge of the major causes and effects of American involvement in World War II by
a) identifying the causes and events that led to American involvement in the war, including the attack on Pearl Harbor;
b) describing the major events and turning points of the war in Europe and the Pacific;
c) describing the impact of World War II on the homefront.

The United States since World War II
USII.7   The student will demonstrate knowledge of the economic, social, and political transformation of the United States and the world between the end of World War II and the present by
a) describing the rebuilding of Europe and Japan after World War II, the emergence of the United States as a superpower, and the establishment of the United Nations;
b) describing the conversion from a wartime to a peacetime economy;
c) identifying the role of America's military and veterans in defending freedom during the Cold War, including the wars in Korea and Vietnam, the Cuban missile crisis, the collapse of communism in Europe, and the rise of new challenges;
d) describing the changing patterns of society, including expanded educational and economic opportunities for military veterans, women, and minorities.
USII.8   The student will demonstrate knowledge of the key domestic issues during the second half of the twentieth century by
a) examining the Civil Rights Movement and the changing role of women; describing the development of new technologies and their impact on American life.

Appendix B

1. What is the purpose of the study?

The number of students with disabilities taking social studies in inclusive classes is growing. The purpose of this study is to develop and test differentiated curriculum enhancements that general education teachers can use with all of their students in inclusive classrooms. Differentiated curriculum enhancements are peer mediated learning activities targeted to provide additional practice with important content, and necessary levels of support for students with disabilities. These enhancements will be aligned with the USII Standards of Learning (SOL) Assessment.

2. How will this benefit my students?

Students with learning disabilities have difficulty with long-term memory, short-term memory and semantic memory. They have difficulty recalling information that they just read or heard as well as remembering information when performing other cognitive tasks. Two strategies that have been used to help memorize content information are mnemonics and classwide peer tutoring. Mnemonic strategies are systematic procedures for enhancing memory. They assist students with encoding the new content information in order to make retrieval easier. Classwide peer tutoring is a learning strategy that has the entire class of students working in pairs to accelerate student learning. This strategy allows more active participation within the classroom and to provide pacing, feedback, immediate error correction, high mastery levels, and content coverage. Both strategies have numerous research studies that demonstrated the effectiveness of each in improving the content knowledge of students.

3. What are the materials?

These materials were designed to and supplement instruction for the, Industrialization, Progressives, and Imperialism Units. These curriculum enhancements are laminated cards with a picture on the front and a mnemonic strategy on the back. The materials are to be used peer-mediated setting to provide additional practice with essential content. It is anticipated that these materials can provide essential review on the concepts and vocabulary related to the SOL in United States history.

4. What are my responsibilities?

    a. Collect parent permissions

      b. Collect student permissions
      c. Administer the pre test and give to Lisa
      d. Teach your unit as usual
      e. Provide 4 sets of instructional time for students to use the materials
      f. Introduce the materials to the students
      g. Supervise students using the materials
      h. Keep track of the time students spend using the materials
      i. Administer the "end of unit" test and give the cantons to Lisa
      j. Administer the Post Test and give to Lisa

5. How many times will I use the materials?

The materials should be used a total of four times in each unit.

6. Where should I keep the materials?

You will be provided with 2 large bins. One bin will be used to store the students' individual folders. The other bin will be used to store the materials and permission forms.

7. When do I give the pretest and what do I do with the tests?

Please administer the pretest as soon as possible. You may give the pretest to students even if they have not returned their forms. You can administer but I cannot use their scores in the final report unless they return both forms.

8. What do I do the first day I use the materials during the Industrialization?

See the script on the following pages.

9. What do I do on the first day I use the materials during Progressives?

See the script on the following pages.

10. What do I do on the first day I use the materials during Imperialism?

See the script on the following pages.

11. What do I do with the unit tests?

Please give the scantrons to Lisa. If you would like to pass them back to students, I can Xerox them and give the scantrons back to you.

12. When do I give the post test and what do I do with the tests?

You may administer the post test one week after you administer the Imperialism unit test. Then, give the scantrons to Lisa.

13. What do I do when the students are using the materials?

The students will be using the materials at their seats. Your job is to circulate around the room to make sure they use the cards correctly and follow the peer tutoring rules. When the students are finished, have them record on their log sheets how long they spent using the materials. Also, record on your log sheet how long they spent using the materials.

14. How do students record their progress?

On the following page is an example of the student record sheet. Each day students use the materials, they record the date and length of time they used the materials next to the corresponding unit.

15. What do I do with the classes that do not use the materials?

The control classes or the business as usual classes will remain just that, business as usual. Do the exact same activities as you normally would do. Do not give them the mnemonic materials or refer to any of mnemonic strategies in this class. In order to see if they work, we need to compare the class receiving the strategies with one that does not receive any of the strategies.

16. What records should I maintain?

On the following page is a teacher record sheet. Each day the students use the materials, record the date and length of time of use next to the corresponding unit. Also, I have provided a comments page. Write the date and then any comments you have of that day's implementation. What worked? What was a problem? What would you like to see changed? What would you like to see kept in the program? And any other comments you may have. It is important to remember to write the date next to each comment.

17. Why did I choose your classroom?

I chose your classroom because you are an exemplary teacher. I wanted to make sure that both classes would receive excellent instruction to test the impact of the mnemonics and classwide peer tutoring.

18. What happens if I get a new student?

a. *If the student comes in before the first day* you give the permission forms, administer the pretest, have the students use the cards and continue as usual.
b. *If the student comes in after the first day* you have the students use the cards, have the student participate with everything. Don't worry about the permissions. A student needs to take the pretest before the first day of using the cards in order to be counted.

20. What happens if a student leaves my school?

a. Don't worry about it; just tell me who it is.

21. What happens if a student moves sections in my classes?

a. Try to have students move from experimental to experimental sections. Try to avoid having students move between conditions.
b. Just tell me who it is.

22. Why am I being observed?

a. We need to make sure the students follow the directions and each teacher teaches the cards the same way.
b. The checklist the observers will use is included in this manual.

23. Teacher Materials
   a. **Student permission form**
   b. **Parent permission form**
   c. **Student Record Sheet**
   d. **Teacher Record Sheet**
   e. **Rules for Classwide Peer Tutoring**
   f. **Script for Day 1: Industrialization**
   g. **Transparencies for Day 1: Industrialization**
   h. **Script for Days 2-4: Industrialization**
   i. **Script for Day 1: Progressives**
   j. **Transparencies for Day 1: Progressives**
   k. **Script for Days 2-4: Progressives**
   l. **Script for Day 1: Imperialism**
   m. **Transparencies for Day 1: Imperialism**
   n. **Script for Days 2-4: Imperialism**
   o. **Teacher Observation Checklist**
   p. **Pretest**
   q. **Post Test**

Appendix C

Student Permission for Participation in Research: Informed Assent

Project Title: Social Studies Instruction

This research is to find out whether or not certain teaching methods help
students learn more in school. Some teachers are going to use new
methods to teach social studies and some teachers will teach as usual. We
will be watching some of these classes. We would like to videotape you
during classes. We would like to ask you questions about your classes. We
would like to look at some of your social studies tests. We would also like
to look at some scores from your school records. Asking you questions will
take only a few minutes of your time. It will not get in the way with any
other school tasks.

RISKS AND BENEFITS
Nothing bad will happen to you if you take part in this study. There are no
rewards or money paid for being in this study. The things we find out may
help you do better in social studies.

CONFIDENTIALITY
Your name will not be used. Your own scores will not be used when we
write our reports. We will never tell anyone who you are. We may use
some of your words when we write our report, but we will never tell
anyone your name.

PARTICIPTION
You don't have to talk to us if you don't want to. If you change your mind
after we start talking and want to stop that is OK. We will not get mad and
nothing will happen to you.

CONTACT

Our names are Margo Mastropieri, Tom Scruggs and Lisa Marshak. Margo and Tom are professors at George Mason University. You can call them if you have any questions about this study at 703-993-4136. Lisa Marshak is a social studies teacher at   You can call her at

The George Mason University of Sponsored Programs knows all about our research. They said that it was OK for us to do it. You can call them at 703-993-4121 if you have any questions about being a part of this research.

CONSENT

I have read this form and I agree to be part of this study.

_____
Name

_____
Date of Signature

_____ I agree to video taping.

_____ I do not agree to video taping

Version date: 9/5/2007

Appendix D

GEORGE
MASON
UNIVERSITY

Margo A. Mastropieri, Thomas E. Scruggs and Lisa Marshak
(703) 993-4136; 703-988-8128; FAX: (703) 993-2063
Email: mmastrop@gmu.edu lisa.marshak@fcps.edu

Approval for the use
of this document
EXPIRES

SEP 2 5 2008

Protocol #_5335_
George Mason University

Parent Permission for Participation in Research: Informed Consent
Project Title: Social Studies Instruction

RESEARCH PROCEDURES: Your child's 7th grade social studies class is participating in a study to test whether or not a supplementary method for teaching social studies is effective or not. Some students will be in classes in which this new technique will be integrated into four of the teacher's lesson plans and some will receive traditional lesson plans. We will be watching and videotaping a few social studies classes in September – December to learn how teachers implement the lessons plans and how students respond.

We would also like to ask your child some questions about social studies. These questions will take only a few minutes of your child's time, and will not interfere with any other classroom activities. We would also like to look at some of his/her tests. These tests include test scores from social studies classes and test scores from existing school records of standardized tests, including SOL achievement scores. Any information collected, including videotapes and test scores, will be kept confidential by maintaining all materials in locked files and offices accessible only to project staff, and viewed only by project staff. Once the information is collected, student numbers will be assigned, and identifying information will be discarded.

This consent form and a student assent form were distributed to your child in his or her social studies class by project staff. At that time the information contained in this letter and their assent form was described and any questions were answered. Students were encouraged to take their forms home and discuss the project with you before signing them and returning them to a designated place in the school.

RISKS: There are no foreseeable risks for participating in this research.

BENEFITS: There are no benefits to you, but your child may benefit improved social studies achievement. In addition, there may be benefits to knowledge about more effective social studies teaching methods and materials for future teachers and students.

CONFIDENTIALITY: The data in this study will be confidential. All information collected will be identified only in terms of a coded identification number and all information reported will be combined data and therefore not identifiable to any

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individual. At the end of the study, all data that was collected solely for the purposes of this study will be destroyed.

PARTICIPATION: Your child's participation is voluntary, and he or she may withdraw from the study at any time and for any reason. If they decide not to participate or if they withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or your child.

CONTACT: This research is being conducted Margo Mastropieri and Tom Scruggs, from the College of Education and Human Development at George Mason University, and Lisa Marshak, social studies teacher at | They may be reached at (703) 993-4136 (Margo and Tom);   Lisa); for questions or to report a research-related problem.

You may contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

CONSENT: I have read this form and agree to participate in this study.

_____

Name

_____

Date of Signature

_____ I agree to video taping.

_____ I do **not** agree to video taping

Version date: 9/5

Appendix E

GEORGE
MASON
UNIVERSITY

Margo A Mastropieri, Thomas E. Scruggs and Lisa Marshak
(703) 993 4130, 703-988-8128; FAX: (703) 993-2063
Email: mmastrop@gmu.edu lisa.marshak@fcps.edu

Teacher Permission for Participation in Research: Informed Consent

Project Title: Social Studies Instruction

RESEARCH PROCEDURES

This research is being conducted to develop, and obtain evidence of potential efficacy of, supplementary social studies materials providing *differentiated curriculum enhancements*, for students with and without disabilities in seventh grade social studies classrooms. Differentiated curriculum enhancements are peer-mediated learning activities targeted to provide additional practice with important content, and necessary levels of support for all students but especially for students with disabilities. The materials will be developed to provide supplemental activities for the content covered in the seventh grade Standards of Learning Assessment to test whether or not the differentiated curriculum has an impact on student learning. Some teachers will be asked to work with project staff and use the newly developed social studies materials in their seventh grade social studies classes. Other teachers will be asked to teach the curriculum as usual. Teachers in the study condition will meet with you for 30 minutes to review the instructional material, be asked to use the materials four times during each unit, and also asked to complete one survey that will take about 30 minutes. These teachers will also be asked to have their classroom videotaped. Teachers in the other condition will be asked to respond to a brief survey about their teaching and be also be videotaped. These videotapes will be used solely for our research purposes associated with this project.

RISKS
There are no foreseeable risks for participating in this research.

BENEFITS
There are no benefits to you, but your students may benefit from improved social studies achievement. In addition, there may be benefits to knowledge about more effective teaching methods and materials for future teachers and students with and without disabilities.

CONFIDENTIALITY
The data in this study will be confidential and maintained in secured offices available to project staff. All data collected will be identified only in terms of a coded identification

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number and all data reported will be aggregated data and not identifiable to any individual.

PARTICIPATION
Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party.

CONTACT
This research is being conducted Margo Mastropieri and Tom Scruggs, from the College of Education and Human Development at George Mason University, and Lisa Marshak, social studies teacher at   They may be reached at (703) 993-4136 (Margo and Tom);   ); for questions or to report a research-related problem. You may contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

CONSENT
I have read this form and agree to participate in this study.

_____
Name

_____
Date of Signature

_____ I agree to video taping.

_____ I do not agree to video taping.

Version date: 9/05/2007

Peer Tutoring Rules

Rules for Tutoring
5. Talk only to your partner about the peer-tutoring program.
6. Talk in a quiet voice.
7. Cooperate with your partner.
8. Do your BEST!

Identifying and Correcting Mistakes

➢ If your partner says the wrong answer, say, *"You missed that one. Can you try again?"*

➢ If your partner gives you a partially correct answer say, "*Almost, can you think of anything else?"*

Checklist
✓ Only one partner picks up the student folders.
✓ The other partner picks up the envelope with the cards.
✓ Sit with your partner.
✓ Begin asking and answering the questions with your partner.
✓ Fill out your tracking sheet in your folder.
✓ Put all of the tutoring materials away.

Appendix G

Student Record Sheet

Units	Activity	Date	Length of Time	Date	Length of Time	Date	Length of Time	Date	Length of Time
Industry	Cards								
Progressives	Cards								
Imperialism	Cards								

Teacher Record Sheet

Units	Activity	Date	Length of Time	Comments
Industrialization	Cards			
	Cards			
	Cards			
	Cards			
Progressives	Cards			
	Cards			
	Cards			
	Cards			
Imperialism	Cards			
	Cards			
	Cards			
	Cards			

Mnemonic/Peer Tutoring Checklist

Teacher _____   Date _____

Beginning of the Activity (time start_____ time end_____)

- ☐ Students are paired
- ☐ One student is general the other is admiral
- ☐ Each student has their folder
- ☐ Each folder has peer tutoring instructions
- ☐ Each folder has a record sheet
- ☐ Each dyad has a an envelope with a stack of cards

During the Activity (time start_____ time end_____)

- ☐ One student reads the cards to their partner
- ☐ If it is incorrect, the student follows the directions on the peer tutoring instructions
- ☐ If the student does not know the answer, the partner reads the strategy on the back of the card
- ☐ The students progress through the cards
- ☐ The students switch roles and follow steps 1-4.

Completion of the Activity (time start_____ time end_____)

- ☐ Students recorded on their tracking sheet their number correct
- ☐ Students recorded on their tracking sheet the date and length of time used
- ☐ Teacher collects the student folders and envelope containing the mnemonic cards.

Time spent on activity _____

Teacher _____   Number of students in class _____
Date   _____   **Unit**: Industry or Progressives or Imperialism
Observer _____   Class Period____ Observation # ___

Traditional Teaching Checklist

	Comments What did you see? What did the teacher/students do? What materials did they use? Describe the activities.
Beginning of Class Period (time spent _____)	
Presentation of new content	
Directions for class activities	
Main Activity of Class Period (time spent _____)	
Listen to lecture	
Independent seat work	
Group Activities	
Watch video	
Wrap up of Class Period (time spent _____)	
Discussion	
Independent Seat Work	
Group Activity	

Appendix K

1. What is urbanization?
   a. When people immigrate to America
   b. When farmers develop large farms
   c. When people move out of cities
   d. When farmers move to the cities making cities large.

2. Who was John Rockefeller?
   a. Businessman who controlled the steel industry
   b. Businessman who controlled the railroad industry
   c. Businessman who controlled the oil industry
   d. Businessman who controlled the banking industry

3. How did businesses increase awareness of their products around the country?
   a. Monopolies
   b. Telegraph
   c. Telephone
   d. Advertising

4. Who was Henry Ford?
   a. Businessman who perfected the assembly line.
   b. Businessman who controlled the railroad business
   c. Businessman who controlled the building industry
   d. Businessman who invented the steel railway lines|

5. How were rural customers able to shop?
   a. Internet and UPS
   b. Grocery and department stores
   c. Weekend trips to big cities
   d. Catalogs and mail-order

6. What type of transportation helped create national markets?
   a. Railroads
   b. Airplanes
   c. Steamboats
   d. Automobiles

7. Where was the meat packing business located?
   a. Pittsburgh
   b. Chicago
   c. Promontory Point

d. Detroit

8. Who invented the telephone?
   a. Andrew Carnegie
   b. John D. Rockefeller
   c. Thomas Edison
   d. Alexander Graham Bell

9. Which industrialist is most commonly associated with the railroad industry?
   a. Henry Ford
   b. John D. Rockefeller
   c. Cornelius Vanderbilt
   d. Andrew Carnegie

10. What happened on farms after the Civil War to cause many people to move to cities?
    a. Disease and insects destroyed all crops.
    b. Mechanization of farms
    c. Many farmers wanted the adventure of living in the cities
    d. The northern government gave their land to the freed slaves

11. Where did the steel industry grow into a huge business?
    a. Pittsburgh
    b. Chicago
    c. New York City
    d. Boston

12. Who was Andrew Carnegie?
    a. Businessman who controlled the oil industry
    b. Businessman who controlled the railroad industry
    c. Businessman who controlled the banking industry
    d. Businessman who controlled the steel industry

13. What is a monopoly?
    a. When many businesses combine to save money
    b. When one business fails to get rid of competition
    c. When a single business has no of competition.
    d. When a business is owned by one person

14. What are iron, gold, oil, and lumber examples of?
    a. Animal products
    b. Man-made products
    c. Minerals

d. Natural resources

15. Businessmen raised large amounts of money to set up this type of company:
    a. Bank
    b. Corporation
    c. Union
    d. Partnership

16. What new inventions helped improve communication during the industrial revolution?
    a. Telegraph and radio
    b. Telephone and radio
    c. Internet and Satellites
    d. Telegraph and telephone

17. What are consumer goods?
    a. Things bought by average people
    b. Things imported from other countries
    c. Money invested in businesses
    d. Equipment used in factories

18. Inventions helped industries grow because:
    a. Workers were paid more money
    b. Businesses joined together to for one large business
    c. They made industries more efficient
    d. They increased child labor

19. What is capital?
    a. One large business that has no competition
    b. Money put into businesses to help them grow
    c. No competition between businesses
    d. Businesses that save money

20. Whose inventions made lighting and electricity available homes and factories?
    a. Albert Einstein
    b. Woodrow Wilson
    c. Thomas Edison
    d. Alexander Graham Bell

21. Who was Boss Tweed?
    a. He bribed people for votes
    b. He fought to end the drinking of alcohol
    c. He fought for a woman's right to vote
    d. He ran Hull house which provided medical care, day care, and job training to immigrants.

22. The 18th Amendment:
    a. Gave women the right to vote
    b. Made alcohol legal again
    c. Made every person born in the US a citizen
    d. Outlawed the drinking of alcohol

23. Who was Jane Addams?
    a. She was a political Boss that bribed people for vote
    b. She fought to end the drinking of alcohol
    c. She fought for a woman's right to vote
    d. She ran Hull house which provided medical care, day care, and job training to immigrants.

24. All of the following were effects of industrialization EXCEPT:
    a. Child labor
    b. Safe working conditions
    c. Low wages
    d. Long hours

25. What did people try to accomplish during the Progressive Movement?
    a. To improve working conditions
    b. To criticize muckrakers
    c. To build a new government
    d. To build trusts and monopolies

26. Who was Susan B. Anthony
    a. She was a political Boss that bribed people for vote
    b. She fought to end the drinking of alcohol
    c. She fought for a woman's right to vote
    d. She ran Hull house which provided medical care, day care, and job training to immigrants

27. Why did many factory owners higher children to work in the factories?
    a. Children needed to training for future jobs

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b. Children were paid less than adults
c. Children worked faster than adults
d. Parents wanted their children to have jobs

28. The 21st Amendment:
    a. Gave women the right to vote
    b. Made every person born in the US a citizen
    c. Outlawed the drinking of alcohol
    d. Made alcohol legal again

29. How did Booker T. Washington believe African Americans should get equal rights?
    a. African Americans should go to school, get a job and then fight for equal rights
    b. African Americans should demand equal rights now
    c. African Americans should sue the government to get equal rights
    d. African Americans should wait three years then join the movement to get equal rights

30. Workers wanted to change all of the following EXCEPT:
    a. Long hours
    b. Unsafe working conditions
    c. Distance from their tenement to the factory
    d. Low wages

31. What does it mean to segregate races?
    a. To force the races close together
    b. To force the races to separate.
    c. The right to vote for different races
    d. Outlaw alcohol for difference races\

32. Who was WEB Dubois?
    a. He was an African American leader that demanded that African Americans demand equal rights immediately
    b. He was an African American leader that believed that African Americans should get a job and education first
    c. He was an African American leader that believed that African Americans should sue the government
    d. He was an African American leader that believed that African Americans should wait three years before getting equal rights

33. What was the 1896 Supreme Court case that said it was legal to separate blacks and whites as long as they were, "separate but equal?"
    a. Brown v. Board of Education
    b. Plessy v. Ferguson
    c. Brown v. Plessy
    d. Dred Scott v. State of Missouri

34. What was the Temperance Movement?
    a. The movement to try to get rid of all alcohol
    b. The movement to try to get women the right to vote
    c. The movement to try to end segregation
    d. The movement to try to end slavery

35. What is the definition of suffrage?
    a. The right to drink alcohol
    b. The right to vote
    c. To keep races separate
    d. Discrimination

36. What are unions?
    a. Groups of people who wanted longer working hours and less pay
    b. Places where workers were paid
    c. Groups of people that would work for free
    d. Groups of people who fought for better working conditions

37. The 19th Amendment:
    a. Made alcohol legal again
    b. Made every person born in the US a citizen
    c. Gave women the right to vote
    d. Outlawed the drinking of alcohol

38. Who are muckrakers?
    a. Journalists that wrote articles to try and end of alcohol
    b. Journalists that wrote articles that told people to protest and strike
    c. Journalists that ran for political office and used the newspapers for advertisements
    d. Journalists that wrote articles about the bad living and working conditions of immigrants.

39. What was the nickname given to a collection of racist laws that discriminated against African Americans?
    a. John Brown
    b. Jim Crow
    c. Uncle Tom
    d. Black Jack

40. President Roosevelt was called the conservationist president because he:
    a. Created national parks
    b. He recycled and conserved water
    c. He tore down forests to help the lumber business
    d. He tried to conserve alcohol by making it illegal

41. What was Teddy Roosevelt's famous quote?
    a. Tiptoe and carry a big stick
    b. Speak softly but invade quickly
    c. Speak softly and carry a big stick
    d. Watch out I have my stick as a weapon

42. Why is Russia important?
    a. Russia invaded the United States
    b. The United States bought Alaska from Russia
    c. The United States invaded Russia
    d. The United States bought Hawaii from Russia

43. What was the final straw that caused the US to declare war on Spain?
    a. The invasion of Cuba
    b. The invasion of Puerto Rico
    c. The explosion of the USS Maine
    d. The murder of a US government official in Cuba

44. What is island hopping?
    a. Animals that migrate from one island to another
    b. When the US bought all of the Hawaiian Islands
    c. When the United States took over Pacific islands in a row to make a route to Asia
    d. Exercises on islands

45. Why is President McKinley important?
    a. He was president when the United States took over Hawaii
    b. He ordered an invasion of Alaska
    c. He ordered an invasion of Panama
    d. He blew up the USS Maine

46. What happened to America as a result of the Spanish-American War?
    a. They controlled Spain
    b. They became a world power
    c. They took control of Cuba
    d. They annexed Cuba

47. How did yellow journalism help cause the Spanish American War?
    a. They reported what was happening in Hawaii
    b. Newspaper owners published made up stories to make Americans hate Spain.
    c. They made up stories about Cuba to get people to vote against a war
    d. They reported on events in Puerto Rico

48. What is the definition of propaganda?
    a. Having radio shows for entertainment
    b. Believing the US should stay out of other countries
    c. Information people spread to get you to do something that you wouldn't normally do
    d. Keeping races separate

49. What country got its independence from Spain after the Spanish American War?
    a. Puerto Rico
    b. Guam
    c. Hawaii
    d. Cuba

50. What is imperialism?
    a. To protect other countries
    b. To stay out of other countries
    c. To take over other countries
    d. To control individual states

51. What happened to the Philippines after the Spanish American War?
    a. They earned their independence
    b. Spain took control
    c. The United States took control
    d. Cuba took control

52. Which leader of Hawaii wanted Hawaii to keep native control of the island?
    a. Queen Liliuokalani
    b. William McKinley
    c. William Seward
    d. Grover Cleveland

53. What were the last two states to become part of the United States?
    a. California and Oregon
    b. New Mexico and Utah
    c. Hawaii and Alaska
    d. Washington and Wyoming

54. Which of the following two bodies of water did the Panama Canal connect?
    a. Bay of Panama and Pacific Ocean
    b. Bay of Panama and Atlantic Ocean
    c. Caribbean and the Gulf of Mexico
    d. Atlantic Ocean and Pacific Ocean

55. Who controlled Cuba before the Spanish American War?
    a. Spain
    b. Guam
    c. The United States
    d. Panama

56. Why did most Americans think the gaining control of Alaska was a bad idea?
    a. Spain controlled it and would declare war on us
    b. The United States couldn't afford it
    c. Because they thought it was an icebox wasteland.
    d. Because they thought Alaska would declare war on us

57. How did the United States gain control of Hawaii?
    a. By force with the army
    b. They bought it from Russia
    c. They bought it from Alaska
    d. By invading Spain

58. What was the name of the cavalry regiment led by Teddy Roosevelt in Cuba?
    a. Roosevelt's Riders
    b. Rough Riders
    c. Roosevelt's Raiders
    d. Teddy's Troops

59. What is the definition of Isolationism?
    a. To take over other countries
    b. The buy other countries
    c. A group of people fighting to overthrow a government
    d. To stay out of other countries affairs and not take sides

60. What is the definition of rebellion?
    a. A group of people taking over to the countries
    b. To buy other countries
    c. A group of people fighting to overthrow a government
    d. To stay out of other countries affairs and remain neutral (not taking sides)

Appendix L

Industrialization Unit Test

1. What is urbanization?
   a. When people immigrate to America
   b. When farmers develop large farms
   c. When people move out of cities
   d. When farmers move to the cities making cities large.

2. Who was John Rockefeller?
   a. Businessman who controlled the steel industry
   b. Businessman who controlled the railroad industry
   c. Businessman who controlled the oil industry
   d. Businessman who controlled the banking industry

3. How did businesses increase awareness of their products around the country?
   a. Monopolies
   b. Telegraph
   c. Telephone
   d. Advertising

4. Who was Henry Ford?
   a. Businessman who perfected the assembly line.
   b. Businessman who controlled the railroad business
   c. Businessman who controlled the building industry
   d. Businessman who invented the steel railway lines

5. How were rural customers able to shop?
   a. Internet and UPS
   b. Grocery and department stores
   c. Weekend trips to big cities
   d. Catalogs and mail-order

6. What type of transportation helped create national markets?
   a. Railroads
   b. Airplanes
   c. Steamboats
   d. Automobiles

7. Where was the meat packing business located?
   a. Pittsburgh
   b. Chicago
   c. Promontory Point
   d. Detroit

8. Who invented the telephone?
   a. Andrew Carnegie
   b. John D. Rockefeller
   c. Thomas Edison
   d. Alexander Graham Bell

9. Which industrialist is most commonly associated with the railroad industry?
   a. Henry Ford
   b. John D. Rockefeller
   c. Cornelius Vanderbilt
   d. Andrew Carnegie

10. What happened on farms after the Civil War to cause many people to move to cities?
    a. Disease and insects destroyed all crops.
    b. Mechanization of farms
    c. Many farmers wanted the adventure of living in the cities
    d. The northern government gave their land to the freed slaves

11. Where did the steel industry grow into a huge business?
    a. Pittsburgh
    b. Chicago
    c. New York City
    d. Boston

12. Who was Andrew Carnegie?
     a. Businessman who controlled the oil industry
     b. Businessman who controlled the railroad industry
     c. Businessman who controlled the banking industry
     d. Businessman who controlled the steel industry

13. What is a monopoly?
     a. When many businesses combine to save money
     b. When one business fails to get rid of competition
     c. When a single business has no of competition.
     d. When a business is owned by one person

14. What are iron, gold, oil, and lumber examples of?
     a. Animal products
     b. Man-made products
     c. Minerals
     d. Natural resources

15. Businessmen raised large amounts of money to set up this type of company:
     a. Bank
     b. Corporation
     c. Union
     d. Partnership

16. What new inventions helped improve communication during the industrial revolution?
     a. Telegraph and radio
     b. Telephone and radio
     c. Internet and Satellites
     d. Telegraph and telephone

17. What are consumer goods?
     a. Things bought by average people
     b. Things imported from other countries
     c. Money invested in businesses
     d. Equipment used in factories

18. Inventions helped industries grow because:
    a. Workers were paid more money
    b. Businesses joined together to for one large business
    c. They made industries more efficient
    d. They increased child labor

19. What is capital?
    a. One large business that has no competition
    b. Money put into businesses to help them grow
    c. No competition between businesses
    d. Businesses that save money

20. Whose inventions made lighting and electricity available homes and factories?
    a. Albert Einstein
    b. Woodrow Wilson
    c. Thomas Edison
    d. Alexander Graham Bell

Progressive Unit Test

1. Who was Boss Tweed?
     a. He bribed people for votes
     b. He fought to end the drinking of alcohol
     c. He fought for a woman's right to vote
     d. He ran Hull house which provided medical care, day care, and job training to immigrants.

2. The 18th Amendment:
     a. Gave women the right to vote
     b. Made alcohol legal again
     c. Made every person born in the US a citizen
     d. Outlawed the drinking of alcohol

3. Who was Jane Addams?
     a. She was a political Boss that bribed people for vote
     b. She fought to end the drinking of alcohol
     c. She fought for a woman's right to vote
     d. She ran Hull house which provided medical care, day care, and job training to immigrants.

4. All of the following were effects of industrialization EXCEPT:
     a. Child labor
     b. Safe working conditions
     c. Low wages
     d. Long hours

5. What did people try to accomplish during the Progressive Movement?
     a. To improve working conditions
     b. To criticize muckrakers
     c. To build a new government
     d. To build trusts and monopolies

6. Who was Susan B. Anthony
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    b. She fought to end the drinking of alcohol
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7. Why did many factory owners higher children to work in the factories?
    a. Children needed to training for future jobs
    b. Children were paid less than adults
    c. Children worked faster than adults
    d. Parents wanted their children to have jobs

8. The 21st Amendment:
    a. Gave women the right to vote
    b. Made every person born in the US a citizen
    c. Outlawed the drinking of alcohol
    d. Made alcohol legal again

9. How did Booker T. Washington believe African Americans should get equal rights?
    a. African Americans should go to school, get a job and then fight for equal rights
    b. African Americans should demand equal rights now
    c. African Americans should sue the government to get equal rights
    d. African Americans should wait three years then join the movement to get equal rights

10. Workers wanted to change all of the following EXCEPT:
    a. Long hours
    b. Unsafe working conditions
    c. Distance from their tenement to the factory
    d. Low wages

11. What does it mean to segregate races?
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    c. The right to vote for different races
    d. Outlaw alcohol for difference races

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13. What was the 1896 Supreme Court case that said it was legal to separate blacks and whites as long as they were, "separate but equal?"
    a. Brown v. Board of Education
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15. What is the definition of suffrage?
    a. The right to drink alcohol
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16. What are unions?
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    c. Journalists that ran for political office and used the newspapers for advertisements
    d. Journalists that wrote articles about the bad living and working conditions of immigrants.

19. What was the nickname given to a collection of racist laws that discriminated against African Americans?
    a. John Brown
    b. Jim Crow
    c. Uncle Tom
    d. Black Jack

20. President Roosevelt was called the conservationist president because he:
    a. Created national parks
    b. He recycled and conserved water
    c. He tore down forests to help the lumber business
    d. He tried to conserve alcohol by making it illegal

Imperialism Unit Test

1. What was Teddy Roosevelt's famous quote?
    a. Tiptoe and carry a big stick
    b. Speak softly but invade quickly
    c. Speak softly and carry a big stick
    d. Watch out I have my stick as a weapon

2. Why is Russia important?
    a. Russia invaded the United States
    b. The United States bought Alaska from Russia
    c. The United States invaded Russia
    d. The United States bought Hawaii from Russia

3. What was the final straw that caused the US to declare war on Spain?
    a. The invasion of Cuba
    b. The invasion of Puerto Rico
    c. The explosion of the USS Maine
    d. The murder of a US government official in Cuba

4. What is island hopping?
    a. Animals that migrate from one island to another
    b. When the US bought all of the Hawaiian Islands
    c. When the United States took over Pacific islands in a row to make a route to Asia
    d. Exercises on islands

5. Why is President McKinley important?
    a. He was president when the United States took over Hawaii
    b. He ordered an invasion of Alaska
    c. He ordered an invasion of Panama
    d. He blew up the USS Maine

6. What happened to America as a result of the Spanish-American War?
    a. They controlled Spain
    b. They became a world power
    c. They took control of Cuba
    d. They annexed Cuba

7. How did yellow journalism help cause the Spanish American War?
    a. They reported what was happening in Hawaii
    b. Newspaper owners published made up stories to make Americans hate Spain.
    c. They made up stories about Cuba to get people to vote against a war
    d. They reported on events in Puerto Rico

8. What is the definition of propaganda?
    a. Having radio shows for entertainment
    b. Believing the US should stay out of other countries
    c. Information people spread to get you to do something that you wouldn't normally do
    d. Keeping races separate

9. What country got its independence from Spain after the Spanish American War?
    a. Puerto Rico
    b. Guam
    c. Hawaii
    d. Cuba

10. What is imperialism?
    a. To protect other countries
    b. To stay out of other countries
    c. To take over other countries
    d. To control individual states

11. What happened to the Philippines after the Spanish American War?
    a. They earned their independence
    b. Spain took control
    c. The United States took control

d. Cuba took control

12. Which leader of Hawaii wanted Hawaii to keep native control of the island?
    a. Queen Liliuokalani
    b. William McKinley
    c. William Seward
    d. Grover Cleveland

13. What were the last two states to become part of the United States?
    a. California and Oregon
    b. New Mexico and Utah
    c. Hawaii and Alaska
    d. Washington and Wyoming

14. Which of the following two bodies of water did the Panama Canal connect?
    a. Bay of Panama and Pacific Ocean
    b. Bay of Panama and Atlantic Ocean
    c. Caribbean and the Gulf of Mexico
    d. Atlantic Ocean and Pacific Ocean

15. Who controlled Cuba before the Spanish American War?
    a. Spain
    b. Guam
    c. The United States
    d. Panama

16. Why did most Americans think the gaining control of Alaska was a bad idea?
    a. Spain controlled it and would declare war on us
    b. The United States couldn't afford it
    c. Because they thought it was an icebox wasteland.
    d. Because they thought Alaska would declare war on us

17. How did the United States gain control of Hawaii?
    a. By force with the army
    b. They bought it from Russia
    c. They bought it from Alaska
    d. By invading Spain

18. What was the name of the cavalry regiment led by Teddy Roosevelt in Cuba?
    a. Roosevelt's Riders
    b. Rough Riders
    c. Roosevelt's Raiders
    d. Teddy's Troops

19. What is the definition of Isolationism?
    a. To take over other countries
    b. The buy other countries
    c. A group of people fighting to overthrow a government
    d. To stay out of other countries affairs and not take sides

20. What is the definition of rebellion?
    a. A group of people taking over to the countries
    b. To buy other countries
    c. A group of people fighting to overthrow a government
    d. To stay out of other countries affairs and remain neutral (not taking sides)

Script Day 1: Industrialization

Say: Today we are going to use some cards to help us learn social studies information. I

will pair up so we can use the cards in partners. On the front of the card will be a picture

and on the back will be the instructions. I will pair you up later, but first let's look at an

example.

Put the overhead of Emily and Sarah using the materials.

Say: In this picture you see Emily reading the back of the card to Sarah. Look at how Sarah is looking at the picture when Emily reads. They key thing here folks is the picture. You need to look at the picture and listen at the same time.

Put the overhead of John D. Rockefeller up. Students should be able to see both the front and the back of the card on the overhead.

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask who is John Rockefeller. Who is John Rockefeller?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. He's the businessman who controlled the oil business.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword for Rockefeller is rock. To help you remember that the Rockefeller was a businessman who controlled the oil business, remember this picture of a rock with oil on top of it."

Say: Then it says I should ask it again, "Who was John Rockefeller?"

Say: Right. He was the businessman who controlled the oil business. If you guys still didn't know the answer, I would have read the card again.

Say: Let's do one more together.

Put the overhead of consumer goods up. Again, students should see both the front and back of the card.

Say: While I read the back of the card, you look at the picture.

Say: Its says for me to ask what are consumer goods? What are consumer goods?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. Things bought by average people.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword for consumer is summer. To help you remember that the consumer goods were things bought by average people remember this picture of average people in a pool wanting to buy products.

Say: Then it says I should ask it again, "What are consumer products?"

Say: Right. Things bought by average people. If you guys still didn't know the answer, I would have read the card again.

Say: Ok, before we begin, let's go over some important points.

4. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
5. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
6. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: Ok, now I am going to put you in pairs. (At this point it is up to you as a teacher if you would like the students to choose or you assign.)

Say: Each group needs to decide which person will be the general and which person will be the admiral. These roles only mean who will read first and who will look at the pictures first. Next time it will be reversed

Say: (After the kids are ready) Ok, the Admirals will ask the questions first. I need all admirals to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
   c. Student Folders
   d. Envelopes

Script Day 2: Industrialization

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Put the overhead of Emily and Sarah using the materials.

Say: In this Remember Emily reading the card and Sarah listening and looking at the picture?

Put the overhead of John D. Rockefeller up. Students should be able to see both the front and the back of the card on the overhead.

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask who is John Rockefeller. Who is John Rockefeller?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. He's the businessman who controlled the oil business.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword for Rockefeller is rock. To help you remember that the Rockefeller was a businessman who controlled the oil business, remember this picture of a rock with oil on top of it."

Say: Then it says I should ask it again, "Who was John Rockefeller?"

Say: Right. He was the businessman who controlled the oil business. If you guys still didn't know the answer, I would have read the card again.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

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Say: (Day 2) This time the Generals will ask the questions first.
        (Day 3) This time the Admirals will ask the questions first.
        (Day 4) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all Generals to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

— —

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
    a. Student Folders
    b. Envelopes

Script Day 3-4: Industrialization

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Remember the key thing is to look at the picture and to listen at the same time.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: (Day 3) This time the Admirals will ask the questions first.
          (Day 4) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all the _____ to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

— —

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
    a. Student Folders
    b. Envelopes

Rockefeller (ROCK)   Businessman that controlled
                                              the oil business.

Ask	Who was John Rockefeller?
Listen for:	Businessman that controlled the oil business.
If correct:	Go on to next card
If wrong:	Say: The keyword for Rockefeller is rock.
Say	To help you remember that the Rockefeller was a businessman who controlled the oil business, remember this picture of a rock with oil on top of it.
Ask	Who is John Rockefeller?
Listen for:	Businessman that controlled the oil business.
If correct	Go onto the next card
If wrong	Start again on this card

Consumer Goods (SUMMER)   Products bought by
                                            average people

Ask	What are consumer goods?
Listen for:	Things bought by average people.
If correct:	Go on to next card
If wrong:	Say: The keyword for consumer goods is summer.
Say	To help you remember that the consumer goods were things bought by average people remember this picture of average people in a pool wanting to buy products.
Ask	What are consumer goods?
Listen for:	Things bought by average people.
If correct	Go onto the next card
If wrong	Start again on this card

Script Day 1: Progressives

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Put the overhead of Emily and Sarah using the materials.

Say: In this Remember Emily reading the card and Sarah listening and looking at the picture?

Put the overhead of unions up. Students should be able to see both the front and the back of the card on the overhead.

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask what is a union. What is a union?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. A group of people who fought for better working conditions.

Say: Let's pretend no one knew the answer. The script says I should say, "The keyword for union is onion. To help you remember that unions were a group of people who fought for better working conditions, remember this picture of a group of onions demanding better working conditions."

Say: Then it says I should ask it again, "What was a union?"

Say: Right. A group of people who fight for better working conditions. If you guys still didn't know the answer, I would have read the card again.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: (Day 1) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all Generals to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
    a. Student Folders
    b. Envelopes

Script Day 2-4: Progressives

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Put up the Unions overhead. Quickly read the bottom focusing primarily on the keyword statement and "To help you remember…" statement.

Say: Remember the key thing is to look at the picture and to listen at the same time.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: (Day 2) This time the Generals will ask the questions first.
        (Day 3) This time the Admirals will ask the questions first.
        (Day 4) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all the _____ to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

━ ━

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:

1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
     a. Student Folders
     b. Envelopes

Appendix Q

Union (ONION)   Group of people who fight for
                                      better working conditions

We demand better working conditions now!

Group together!   Fight!   Come on People!

Ask	What are unions?
Listen for:	Group of people who fought for better working conditions.
If correct:	Go on to next card
If wrong:	Say: The keyword for union is onion.
Say	To help you remember that unions were a group of people who fought for better working conditions, remember this picture of a group of onions demanding better working conditions.
Ask	What are unions?
Listen for:	Group of people who fight for better working conditions.
If correct	Go onto the next card
If wrong	Start again on this card

Script Day 1: Imperialism

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Put the overhead of Emily and Sarah using the materials.

Say: In this Remember Emily reading the card and Sarah listening and looking at the picture?

Put the overhead of Yellow Journalism up. Students should be able to see both the front and the back of the card on the overhead.

Say: While I read the back of the card, you look at the picture.

Say: It says for me to ask how did yellow journalism help cause the Spanish American War. So, How did yellow journalism help cause the Spanish American War?

Say: Then it says listen for an answer. Does anyone know the answer?

Say: Right. Newspaper owners published made up stories to make Americans hate Spain.

Say: Let's pretend no one knew the answer. The script says I should say, the keyword for yellow journalism is yellow. To help you remember that yellow journalism helped cause the Spanish American War by publishing made up stories to make Americans hate Spain, remember this picture of a man reading a yellow newspaper with anti-Spain headlines and just kidding and not really underneath them.

Say: Then it says I should ask it again, "How did yellow journalism help cause the Spanish American War?"

Say: Right. Newspaper owners published made up stories to make Americans hate Spain. If you guys still didn't know the answer, I would have read the card again.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: (Day 1) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all Generals to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

▬ ▬

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
    a. Student Folders
    b. Envelopes

Script Day 2-4: Imperialism

Say: Today we are going to use the cards again to help us learn social studies information. On the front of the card if you remember is a picture and on the back will be the instructions. Let's look at an example.

Remember the key thing is to look at the picture and to listen at the same time.

Say: Ok, before we begin, let's go over some important points.

1. What should my partner do when I am reading the back of the card? (Look at the picture.) Remember that the whole purpose of these cards is to use the picture to help you remember the history information.
2. (Pass out their folders.) Each person gets a two pocket folder for this activity. Inside the folder are directions. Let's go over those directions.
3. On the other side is a record sheet. At the end of today's activity, we will write the date and length of time we used the materials.

Say: (Day 2) This time the Generals will ask the questions first.
        (Day 3) This time the Admirals will ask the questions first.
        (Day 4) This time the Generals will ask the questions first.

Say: (After the kids are ready) Ok I need all the _____ to come up and get an envelope with the cards inside. (Pass out envelopes).

Say: You may begin when you sit down.

_____

The teacher should walk around and make sure that:

1. One student reads the cards to their partner
2. If it is incorrect, the student follows the directions on the back of the card
3. If the student does not know the answer, the partner reads the strategy on the back of the card
4. The students progress through the cards
5. The students switch roles and follow steps 1-4.

After 15 minutes:
1. Have students record the date and length of time they used the cards in their folders.
2. Collect:
    a. Student Folders
    b. Envelopes

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Appendix S

Yellow Journalism (YELLOW)   Helped cause the Spanish American
                                                    War by newspaper owners
                                                    publishing made up stories to make
                                                    Americans hate Spain

Ask	How did yellow journalism help cause the Spanish American War?
Listen for:	Newspaper owners published made up stories to make Americans hate Spain.
If correct:	Go on to next card
If wrong:	Say: The keyword for yellow journalism is yellow.
Say	To help you remember that yellow journalism helped cause the Spanish American War by publishing made up stories to make Americans hate Spain, remember this picture of a man reading a yellow newspaper with anti-Spain headlines and just kidding and not really underneath them.
Ask	How did yellow journalism help cause the Spanish American War?
Listen for:	Newspaper owners published made up stories to make Americans hate Spain.
If correct	Go onto the next card
If wrong	Start again on this card

THE RISE OF BIG BUSINESS TEST

Choose the best answer for each question:

1. **Before** the Civil War, what type of economy did the United States have?
- a. mechanized
- b. agricultural
- c. industrial
- d. peaceful

2. How were rural customers able to shop?
- a. internet and UPS
- b. grocery and department stores
- c. weekend trips to big cities
- d. catalogs and mail-order

3. What helped create national markets?
- a. railroads
- b. airplanes
- c. steamboats
- d. cattle

4. The meat packing industry aided in the development this city?
- a. Pittsburgh
- b. Chicago
- c. Promontory Point
- d. Detroit

5. Why was there less of a demand for workers in America's farms after the Civil War?
- a. disease and insects destroyed all crops
- b. mechanization meant less need for large numbers of workers
- c. people no longer ate vegetables
- d. horses did all the heavy labor duties on farms

6. What inventions/innovations allowed Henry Ford to increase production of automobiles and keep costs lower?
- a. cheap paint and standardized parts
- b. light weight aluminum
- c. iron parts and rubber tires
- d. assembly line and standardized parts

7. How did manufacturers increase awareness of their products across the country?
- a. word of mouth
- b. letters to friends
- c. advertising
- d. television

8. Who was the steel company owner who also gave a lot of money to charity?
- a. Thomas Edison
- b. Cornelius Vanderbilt
- c. Andrew Carnegie

d. John D. Rockefeller

9. Who invented the telephone?
   a. Andrew Carnegie
   b. Alexander Graham Bell
   c. John D. Rockefeller
   d. Thomas Edison

10. Which industrialist is most commonly associated with the railroad and shipping industry?
    a. Henry Ford
    b. Cornelius Vanderbilt
    c. John D. Rockefeller
    d. Andrew Carnegie

11. Which industrialist is most commonly associated with the oil industry?
    a. Andrew Carnegie
    b. Cornelius Vanderbilt
    c. John D. Rockefeller
    d. J.P. Morgan

12. The Standard Oil Company ended its competition by controlling all parts of the oil industry. This is an example of:
    a. company
    b. incorporation
    c. monopoly
    d. subsidy

13. What are iron, gold, oil, and lumber examples of?
    a. luxuries
    b. man-made products
    c. consumer goods
    d. natural resources

14. Using the map below, in what two regions of the United States could you find the most factories and mills?
    a. 1 & 2
    b. 2 & 3
    c. 3 & 4
    d. 1 & 4

The United States of America

15. Businessmen raised large amounts of money to set up this type of company:
    a. bank
    b. corporation
    c. union
    d. partnership

16. The telegraph and telephone improved_____.
    a. commercialization
    b. transportation
    c. communication
    d. medication

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17. What are consumer goods?
   a. **items bought by average people**
   b. **Items imported from other countries**
   c. **money invested in businesses**
   d. **equipment used in factories**

18. Inventions helped industries because:
   a. **they helped workers earn more money**
   b. **they ended competition**
   c. **they made industries more efficient**
   d. **they increased the minimum wage**

19. Which of the following did **NOT** lead to the rise in Big Business?
   a. **inventions and innovations**
   b. **improved transportation**
   c. **available natural resources**
   d. **the shortage of buffalo**

20. What is the term for money invested in businesses?
   a. **capital**
   b. **natural resources**
   c. **credit**
   d. **savings**

21. **After** the Civil War, what type of economy did the U.S. have?
   a. **monopolized**
   b. **industrialized**
   c. **agricultural**
   d. **labor based**

22. Whose inventions made lighting and electricity available and useful in homes and factories?
   a. **Thomas Edison**
   b. **Albert Einstein**
   c. **Woodrow Wilson**
   d. **Alexander Graham Bell**

". . . a car which anyone could afford to buy, which anyone could drive anywhere, and which almost anyone could keep in repair."

–Charles Sorenson, 1908

23. This quotation describes the new:
   a. **Chicago Pullman trolley car**
   B. **bicycle**
   c. **Model T Ford**
   d. **Wright Brothers airplane**

". . . This is.. the duty of the man of wealth: .. to set an example of modest living..... to produce the most beneficial results for the community—

–Andrew Carnegie, "Wealth," *The North American Review,* June 1889

24. Andrew Carnegie was a philanthropist because he:
   a. donated money
   b. Lowered the cost of production
   c. Ended the Homestead Strike
   d. Used the Bessemer Process

25. According to the map below, which of following statements is true about *steel centers?*
   a. they were located near shipping routes along the Great Lakes
   b. they were located along the Mississippi River
   c. they were located in Canada
   d. they were located in the southeastern part of the United States

The Steel Industry in the Early 1900s

Iron ore shipments
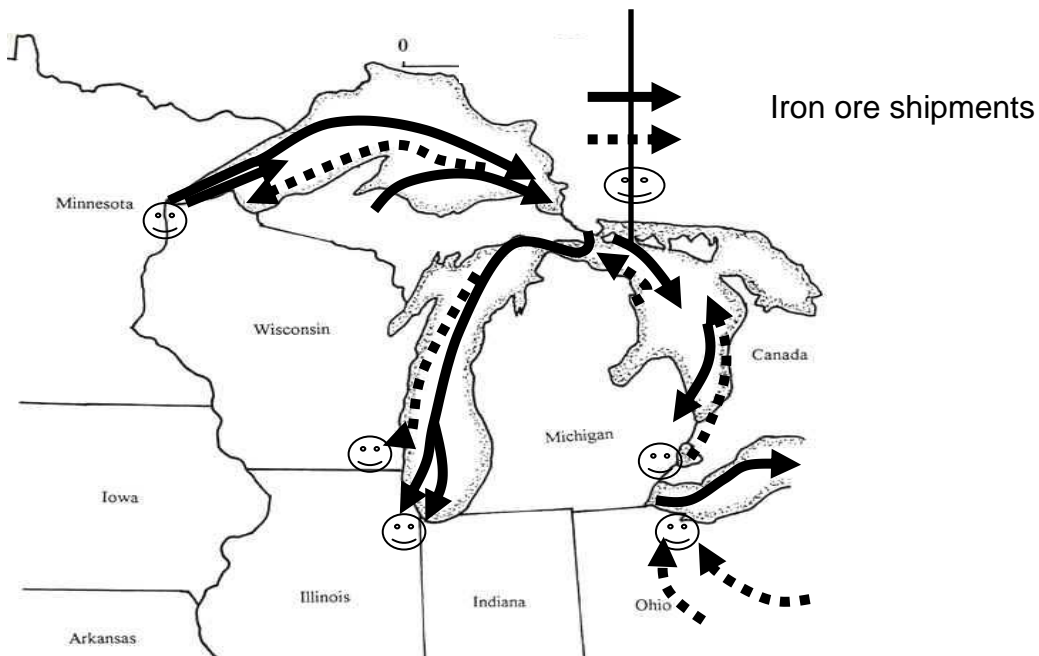
Progressive Movement Test

Choose the best answer for each question:

1. Who was the leader of the political machine that controlled local jobs and services?
    a. Al Capone
    b. Boss Hogg
    c. Boss Tweed
    d. Jane Addams

2. Which amendment made it illegal to make, transport, or sell alcohol?
    a. 15th Amendment
    b. 18th Amendment
    c. 17th Amendment
    d. 20th Amendment

3. Who helped found the National Association for the Advancement of Colored People (NAACP)?
    a. George Washington Carver
    b. Maggie Lena
    c. W.E.B. Du Bois
    d. Ida Tarbell

4. How did muckrakers inform the public about corruption?
    a. by writing books, newspapers and magazine articles
    b. by calling for protest rallies and industrial strikes
    c. by running for political office on reform platforms
    d. by asking Congress for reform regulation

5. How did workers respond to long hours, unsafe working conditions, and low wages?
    a. organized unions
    b. organized trusts
    c. organized coalitions
    d. organized monopolies

There would be meat stored in great piles; in rooms; and the water from leaky roofs would drip over it, and thousands of rats would race about on it. . . . These rats were nuisances, and the packers would put poisoned bread out for them; they would die, and then rats, bread and meat would go into the hoppers together . . .

–Upton Sinclair, *The Jungle*

6. This excerpt describes the horrible conditions of the meatpacking industry in Chicago. This writing is an example of _____.
   a. **kickbacks**
   b. **muckraking**
   c. **Prohibition**
   d. **Trusts**

7. Workers wanted to change all of the following *EXCEPT*...
   a. **long hours**
   b. **unsafe working conditions**
   c. **distance from their tenement to the factory**
   d. **low wage**s

8. Which two groups of Americans gained better educational opportunities during this time period?
   a. **Women and African Americans**
   b. **Scandinavians and Germans**
   c. **Chinese and Irish**
   d. **Mexicans and Asians**

9. Which statement best describes the Progressive Movement?
   a. **Exposed problems and offered solutions to the negative effects of industrialization**
   b. **Progressives criticized muckrakers**
   c. **Progressives were against the government**

       d. **Progressives supported trusts and monopolies**

10. What methods did labor unions use to get better working conditions?
       a. **the help of Native Americans**
       b. **ads on the radio**
       c. **protests and strikes**
       d. **taking of hostages**

> Suffrage is the pivotal (important) right, and if it could have been secured at the beginning, women would not have been half a century in gaining the privileges enumerated above, for privileges they must be called so long as others may either give or take them away. If women could make the laws or elect those who make them, they would be in the position of sovereigns instead of subjects. "

11. This is passage by Susan B. Anthony argues that _____ is important or necessary for change in the treatment of women.
       a. **the right to work**
       b. **the right to attend college**
       c. **the right to vote**
       d. **the right to own their own businesses**

12. What was the 1896 Supreme Court case that said it was legal to separate blacks and whites as long as they were, "separate but equal?"
       e. **Brown v. Board of Education**
       f. **Plessy v. Ferguson**
       g. **Brown v. Plessy**
       h. **Dred Scott v. State of Missouri**

13. What Amendment gave women the right to vote?
       a. **18th**
       b. **19th**
       c. **20th**
       d. **21st**

14. Settlement Houses, like the Hull House, were created to:
       a. **provide job training to immigrants**
       b. **assist in getting medical care**

     c. provide daycare for children
     d. all of the above

15. A suffragist that fought for women's right to vote was:
     a. WEB DuBois
     b. Jane Crow
     c. Mother Cabrini
     d. Susan B. Anthony

> "I urge that provision be made for both protection and more rapid development of the national forests. Otherwise, either the increasing use of these forests by the people must be checked or their protection against fire must be dangerously weakened"
>
> **Theodore Roosevelt**
> **Source: Chicago, IL, June 17, 1912**

16. This excerpt demonstrates Roosevelt's strong concern for _____.
     a. freedom of speech
     b. conservation of natural resources
     c. male voting rights
     d. Jim Crow Laws

17. What was the nickname given to segregation laws that discriminated against African Americans?
     a. John Brown
     b. Jim Crow
     c. Uncle Tom
     d. Black Jack

18. Many factory owners used child labor because:
     a. children could read and write better than their parents
     b. children could be paid less than adults
     c. machines were too small for adults
     d. no school available

19. All of the following were negative effects of industrialization EXCEPT:

a. child labor
b. safe working conditions
c. low wages
d. long hours

20. In 1892, 13 men were killed in a conflict between striking steel workers and strike breakers at Carnegie's steel plant in Pittsburgh. The strike turned many Americans against unions and organized labor, which they blamed for the violence. This event was called the:
    a. **Pittsburgh Strike**
    b. **Homestead Strike**
    c. **Richmond Strike**
    d. **Boston Strike**

21. Which African American leader supported vocational training in order for African Americans to achieve equal rights?
    a. **Booker T. Washington**
    b. **George Washington Carver**
    c. **W.E.B. Dubois**
    d. **Martin Luther King**

22. Who founded the Hull House?
    a. **Susan B. Anthony**
    b. **Booker T. Washington**
    c. **Jane Addams**
    d. **W.E.B. Dubois**

Voting Rights for Women, 1919
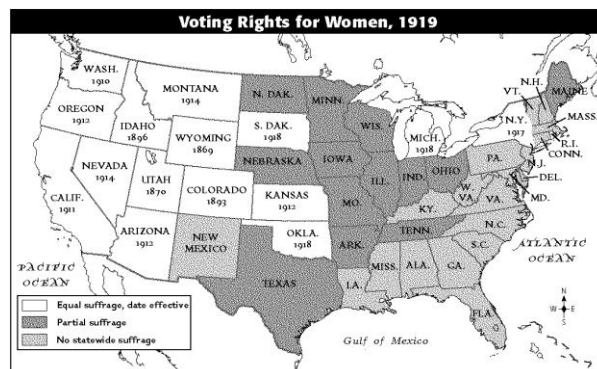
23. Based on the map above, voting rights (suffrage) for women were different depending on where you lived. What was the trend (pattern of change) for women's suffrage as you move from East to West?

    a. <u>More</u> voting rights for women as you move west
    b. <u>Less</u> voting rights for women as you move west
    c. Voting rights for women were <u>the same</u> as you moved west
    d. <u>No</u> voting rights for women existed before 1919

History of Union Membership (1920-2000)		
Year	*Number* of Workers in Unions (millions)	*Percent* of Total Workforce in Unions
1920	4	13
1930	3.4	12
1940	8.7	27
1950	14.2	32
1960	17	31
1970	19.3	27
1980	17.5	24
1990	16.7	16
2000	16.4	13

24. Based on the table, in which year was the ***percent*** of union membership among the workforce at its highest?
    a. **1945**
    b. **1960**
    c. **1950**
    d. **1970**

25. Based on the table, in which year was the ***number*** of union workers at its highest?
    a. **1940**
    b. **1960**
    c. **1950**
    d. **1970**

IMPERIALISM (SPANISH-AMERICAN WAR) TEST

<u>Cho ose the best answer for each question:</u>

1. Staying out of (noninvolvement) in world affairs is called:
   a. **expansionism**
   b. **isolationism**
   c. **imperialism**
   d. **annexation**

2. Before the Spanish American War the people of Cuba lived under the rule of:
   a. **Mexico**
   b. **Spain**
   c. **Russia**
   d. **Britain**

3. Which incident led Congress to declare war on Spain?
   a. **explosion of the *Maine***
   b. **arrest of Jose Marti**
   c. **Spanish ships in Santiago**
   d. **Capture of San Juan Hill**

4. The first naval battle of the Spanish-American War took place in:
   a. **Spain**
   b. **Puerto Rico**
   c. **The Philippines**
   d. **Guam**

5. Which leader of Hawaii wanted Hawaii to keep native control of the island?
   a. **Queen Liliuokalani**
   b. **William McKinley**
   c. **William Seward**
   d. **Grover Cleveland**

6. As a result of the Spanish American War, the United States:
   a. **emerged as a World power**
   b. **turned to Isolationism**
   c. **returned Cuba to Spain**
   d. **lost territory**

7. Rebellion in what country triggered the Spanish-American War?
   a. **Mexico**
   b. **Cuba**
   c. **Puerto Rico**
   d. **Guam**

> "Speak softly and carry a big stick."

8. The excerpt above expresses an opinion that supports an American foreign policy of:
   a. **isolationism**
   b. **journalism**

c. imperialism
d. pacifism

> "The Philippines are ours forever. . . . And just beyond the Philippines are China's illimitable markets. We will not retreat from either. . . . The Pacific is our ocean."

9. The quotation above characterizing U.S. foreign policy is often associated with which president?
    a. **William McKinley**
    b. **Grover Cleveland**
    c. **Theodore Roosevelt**
    d. William Howard Taft

> "[Panama was mostly] a damp, tropical jungle, intensely hot, swarming with mosquitoes. . . ."

10. The mosquitoes mentioned in the excerpt above probably carried the deadly diseases of:
    a. **smallpox and scarlet fever**
    b. **rickets and diphtheria**
    c. **influenza and malaria**
    d. **yellow fever and malaria**

11. The United States bought Alaska from which country?
    a. **England**
    b. **Russia**
    c. **France**

d. Germany

12. What was the name of the cavalry regiment led by Teddy Roosevelt in Cuba?
    a. **Roosevelt's Riders**
    b. **Rough Riders**
    c. **Roosevelt's Raiders**
    d. **Teddy's Troops**

> "***The Sinking of the Maine is the Work of an Enemy***"

13. The above headline is an example of:
    a. **muckraking**
    b. **yellow journalism**
    c. **investigating reporting**
    d. **yellow fever journalism**

14. Which of the following statements expresses the opinion of an imperialist?
    a. **"We shouldn't try and take over weaker nations"**
    b. **"We can't defend colonies far away from the U.S."**
    c. **"American farmers need to find foreign markets for their products"**
    d. **"Taking other countries without their permission violates the Declaration of Independence"**

15. Which of the following two bodies of water did the Panama Canal connect?
    a. **Bay of Panama and Pacific Ocean**
    b. **Indian Ocean and Atlantic Ocean**
    c. **Caribbean and the Gulf of Mexico**
    d. **Atlantic Ocean and Pacific Ocean**

16. All of the following are reasons for the U.S. involvement in the Spanish-American War **EXCEPT:**
    a. **Protection of American businesses in Cuba**
    b. **Sinking of the USS Maine**
    c. **Support for Cuban independence**
    d. **Building of the Panama Canal**

> "It is foolish to try and rule people who have a different culture than our own. We are nothing like them."

17. The above quotation is the opinion of a(n)
    a. **imperialist**
    b. **anti-imperialist**
    c. **yellow journalist**
    d. **muckraker**

18. The purchase of which territory was ridiculed for being a "useless icebox"?
    a. **Alaska**
    b. **Hawaii**
    c. **Guam**
    d. **Puerto Rico**

1898
Spanish-
American War

1904
Roosevelt
Corollary issued

1914
Panama
Canal opens

United States

Presidents	Cleveland 1893–1897	McKinley 1897–1901	Roosevelt 1901–1909	Taft 1909–1913	Wilson 1913–1921

1900   **1910**   **1920**

World

1895
José Martí leads
revolt in Cuba

1910
British form Union
of South Africa
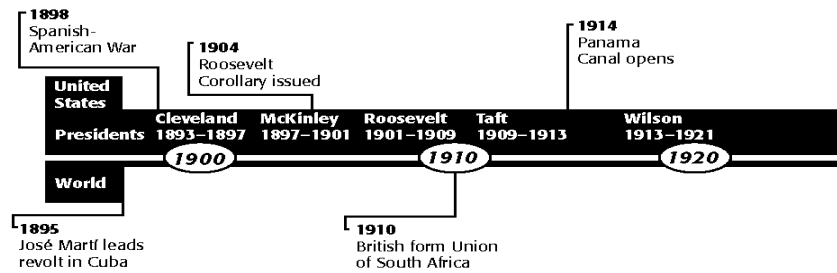
19. Based on the timeline, the Spanish-American War in 1898 was fought during the administration of which president?

      a. Taft

      b. Roosevelt

      c. McKinley

      d. Wilson

United States Overseas Possessions, 1900

U.S. possessions with date acquired

• Ports open to U.S. trade

RUSSIA

ASIA

Alaska (1867)

NORTH AMERICA

CHINA

JAPAN

Shanghai

Nagasaki

Canton

PACIFIC OCEAN

UNITED STATES

Midway Islands (1867)

Philippines (1898)

Guam (1898)

Wake I. (1899)

Howland I. (1857)

Johnston I. (1858)

Hawaiian Islands (1898)

Kingman Reef (1858)

Palmyra Atoll (1898)

Baker I. (1857)

Jarvis I. (1857)

American Samoa (1899)

Puerto Rico (1898)

SOUTH AMERICA

AUSTRALIA

20. According to the map above, **_most_** United States overseas possessions in 1900 were:

      a. in the Caribbean

      b. in the United States

      c. in the Atlantic Ocean

      d. in the Pacific Ocean

The Spanish-American War
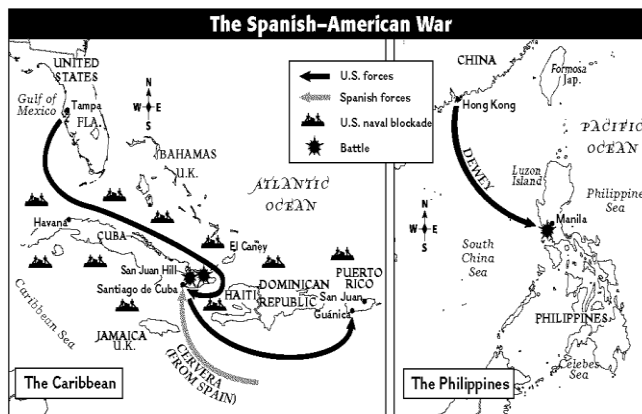
21. According to the map above, the Spanish American War was fought on all of the following islands EXCEPT:
   a. Cuba
   b. The Bahamas
   c. Puerto Rico
   d. Philippines

United States Overseas Possessions, 1900
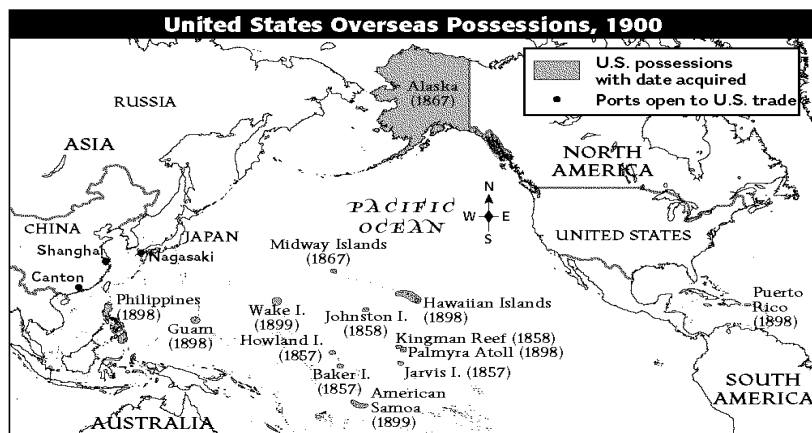
22. Which of the US territories shown on the map eventually became US states?
   a. Puerto Rico and Guam
   b. Puerto Rico and Philippines
   c. Panama and Alaska
   d. Alaska and Hawaii
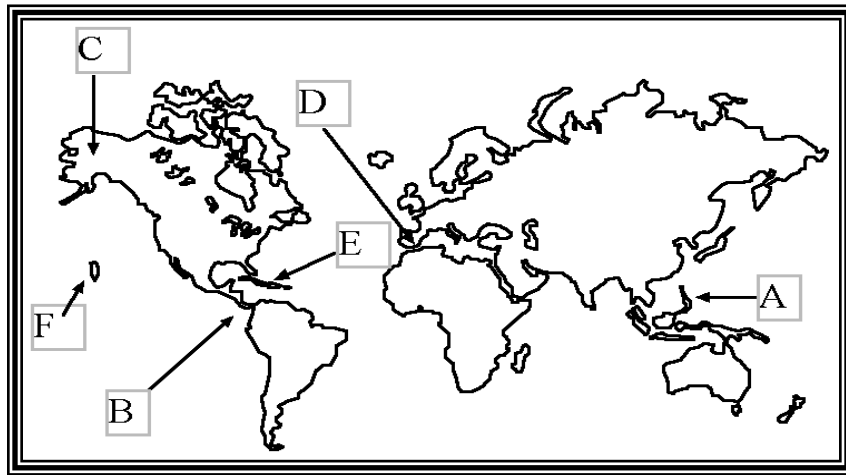
23. Which country on the map above is labeled **A**?
     a. **Hawaii**
     b. **Philippines**
     c. **Cuba**
     d. **Alaska**

24. Which country on the above map is labeled **B**?
     a. **Hawaii**
     b. **Philippines**
     c. **Panama**
     d. **Cuba**

25. Which country on the above map is labeled **E**?
     a. **Hawaii**
     b. **Philippines**
     c. **Panama**
     d. **Cuba**

<u>Word Up!</u> Industrialization

	Word	Definition
1		When an industry or business has no competition.
2		This industry was located in Pittsburgh, Pennsylvania. The capital of this industry was Andrew Carnegie.
3		A group of people (investors) combine their money to form one company.
4		A group of companies that work together to control an industry.
5		Having to do with the country (farm areas).
6		This industry was located in New England and manufactured clothing.
7		When the United States changed from making its' money from handcrafted goods to factories produced goods. This led to the growth of businesses.
8		Having to do with the city.
9		This industry was located in Detroit, Michigan. Henry was the captain of this industry and created the assembly line.
10		Industrialization led to huge companies known as _____.
11		Places across the country where the railroad took products from factories to be sold.
12		A change from making things by had to making things by machine. This caused many farms to fire workers.
13		Vocabulary word that means workers.
14		Vocabulary word that is another name for money put into a business.

Word Bank

Industrialization	Labor	National Markets	Automobile Industry
Big Business	Corporation	Steel Industry	
Mechanization	Rural	Urban	
Textile Industry	capital	Trust Monopoly	

Appendix X

Warm-ups

Student Version

1. What was the significance of the Battle of Little Bighorn?
2. Where did the 2 railroad companies meet?
3. What is a Boomtown?
4. What is a Ghost Town?
5. What was the Open Range?

Warm-ups

Teacher Version

1. What was the significance of the Battle of Little Bighorn?
a. First battle Native Americans won? **b. Last Battle the Native American's won?** **c. Ended tribal ownership of land**
2. Where did the 2 railroad companies meet?
a. Omaha, NE **b. Promontory Point, UT** **c. San Francisco, CA**
3. What is a Boomtown?
a. A town for cowboys **b. A town for gold miners** **c. Abandoned town**
4. What is a Ghost Town?
a. A town for cowboys **b. A town for gold miners** **c. Abandoned town**
5. What was the Open Range?
a. A place where cowboys walked the cows **b. A hunting range** **c. Large farms**

MR. SEARS' CATALOGUE

What is a catalogue?

Why do people order goods from catalogues?

Why do you think catalogues were so important in the late 1880's?

Watch the video clip about Mr. Richard Sears. Check off the statements that are true; based on what the video says:

_____ a. The first Sears catalogues sold over 100,000 products and were sent to over 20 million Americans.

_____ b. Railroads had nothing to do with the mail order business.

_____ c. Many of Sears' customers were people who lived on isolated farms in the Great Plains.

_____ d. Richard Sears wrote all the ads in his catalogue.

_____ e. Richard Sears did not make much money from his mail order business.

_____ f. Sears' catalogues made it possible for non-city dwellers to buy the many goods now being produced in the United States.

1897
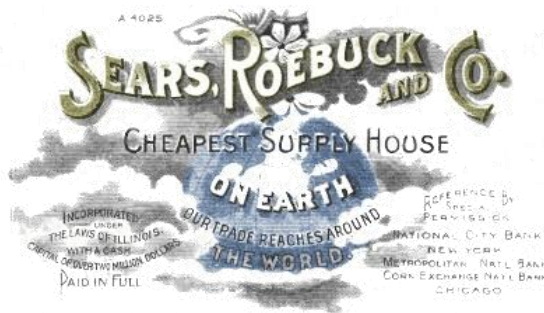
Page 95: How much would a bike cost? _____
Page 97: How much would a Steel Safe cost? _____
Page 97: How much would Ladies Ice Skates cost? _____
Page 119: How much would a Stove cost? _____
Page 233: How much would a Grand Army Hat cost? _____
Page 651: How much would a Solid Oak Table Cost? _____
Page 666: How much would a Couch cost? _____
Page 725: How much would a wagon cost? _____

Using the index, find these pages:

Axes, Boys _____

Blackboards _____

Cases, Gun _____

Deviled Crabs _____

Ear Cleaner _____

False Mustaches _____
Fine Combs _____

Appendix Z

The Progressive Movement

I. _____ Movement

A. People asking for _____(_____) for a better way of life

B. _____ to _____ _____ by industrialization,

urbanization and immigration

C. _____ Reform Movement in American History

    D. Women Take the Lead- _____

    _____

II. _____ _____ Challenges

A. _____ _____- _____ of African

Americans and whites in public places, based on race, other groups experienced

segregation (made legal because of _____ versus _____)

1. _____ against African-Americans continued after

_____

        2. "_____" laws created a system of _____

        _____

3. African-Americans _____ in their _____ to

discrimination and   "Jim Crow"

    B. _____ (Laws)

1. _____ _____- abolished (ended) slavery

2. The _____ Amendment - All people born in the U.S. are to receive

_____

3. "_____" Laws- _____ to _____ against

African Americans

a. Made _____ practices legal in many areas and states

b. Characterized by _____ in housing, work,

education, and Government

4. _____ Amendment – ensures all citizens the _____

_____ regardless of race or color or previous condition of servitude

and social rights for African Americans

     C. The African American _____

1. _____ - Believed equality could be achieved through

_____ (hands on work) and accepted

_____

a. created the _____, a school teaching African

Americans _____

2. _____- He was a writer and educator and believed in full

political rights and _____

a. helped _____- fighting for African American civil

liberties

D. Freedom? Whose Freedom? _____

_____

III. Living Conditions

_____- Slum housing, often home to immigrants

 B. Progressive Answer

_____- founder of the Hull House

2. _____- a settlement house- place where

_____ could receive help

IV. Working Conditions: Labor

   A. Negative effects of_____(_____)

1. Child Labor

a. By 1910, almost _____ were_____

1. _____ _____ - about _____

2. _____- Sometimes _____

3. _____ working _____- _____

Shirtwaist _____

2. Progressive era_____ and _____ helped create laws to

protect workers and children

   B. Rise of Organized _____

_____ created to deal with problems in the workplace

a. _____- Workers that _____

_____ to get _____ salaries and working

_____ from their employers

b. The American Federation of Labor _____- Helped to get _____

_____ made, to help the workers _____

a. The _____ Strike- 1892 the workers at the Carnegie steel

factory in Pennsylvania went on strike because the company _____their

wages or   _____

                    1. The strike lasted for_____

                    2. This time the workers _____ win

        3. Employers learned to _____ with union leaders

        4. _____- work when everyone else is on strike

        5. Fighting the Trusts _____

_____

C. Workplace Reforms- Progressive Answers

1. Laws _____ conditions

2. _____ work _____

   3. _____ labor

D. Muckrakers

1. _____ investigating corrupt businesses or people to improve things

       a. Jacob _____- How the Other Half Lives- _____

       b. _____- The Jungle- meat packing industry

2. Progressive Results

a. _____- law that addressed unsanitary meat

packing issues

b. _____- law that addresses issues of false

product claims (medicine and food)

V. _____ – corrupt political groups

that helped supporters in return for votes, bribery

    A. _____- a political boss in New York

B. _____ rewarded government workers for good

work, not for political affiliation

    C. Muckrakers and Bosses _____

_____

VI. Conservation Movement

A. _____ – Teddy Roosevelt's system to protect

and preserve land

B. _____ – sought to _____

_____ resources such as Grand Canyon, Mesa Verde, and forest

land

    C. Teddy & the Professor _____

_____

VII. _____ Movements

    A. The _____ Movement

1. Groups _____ the making and consuming of _____

2. Prohibition- _____ Amendment _____ (outlawing) the

manufacture, sale, and transport of _____

3. _____ to the 18th Amendment (_____)

    a. Expected

Businesses _____ beverages to their customers

Alcoholism _____ during this time

Police and government agents were in charge of enforcing the

_____.

b. Unexpected

People _____ alcoholic beverages

_____, such as Al Capone, made a fortune by providing alcohol that

was _____ in from Canada and the Caribbean

_____ called speakeasies were established to sneak alcohol to

customers

4. Clash of Culture_____

    _____

B. Women's _____ (right to vote) helped women gain equal rights

1. Increased _____

2. Attained Voting Rights For Women

a. _____ – women's right to vote

1. _____ and _____

worked together to help women get the right to vote (suffrage)

3. Women Suffragist _____

_____

Yellow Journalism

The USS Maine

Facts: What do we know is

Yellow Journalism: What

-
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-

How did Yellow Journalism help cause the Spanish American War?

RISE OF INDUSTRIALIZATION

Map Directions:

1. Label the Northeast and Midwest states.
2. Outline the Northeast states in one color.
3. Outline the Midwest states in a different color.
4. Label Detroit, Michigan.
5. Label Pittsburgh, Pennsylvania.
6. Label Chicago, Illinois
6. Color in all of the New England states. (use one color)
7. Label the Great Lakes.
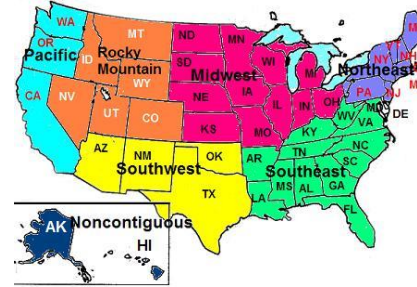
CUT AND PASTE: *Cut the pictures off of the second page and paste them onto your map.*

8. Cut out the pictures of the **textile mills** and glue the picture in the NEW ENGLAND states.

9. Cut out the pictures of the **automobiles** and glue near DETROIT, MICHAGAN.

10. Cut out the pictures for **coal mining** and glue the picture near the GREAT LAKES.

11. Cut out the pictures for **steel factories** and glue the picture near PITTSBURGH, PENNSYLVANIA.
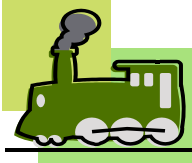
12. Cut out the pictures of cows for the **meat packing industry** glue the picture near CHICAGO, ILLINOIS.

13. **Draw** several railroad tracks from the factories and mills to the Great Plains and West Coast. **(Your own drawing)**
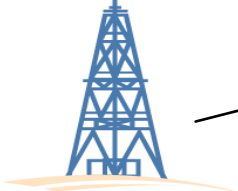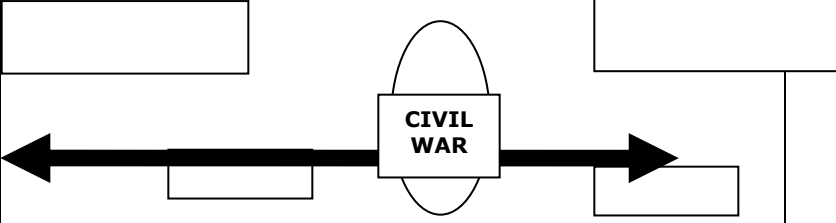
14. Cut out the pictures for the **railroads** and glue the pictures above/below the railroad tracks.
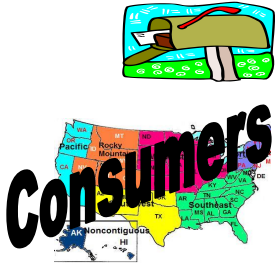
Textile Mill	**Automobile**	**Railroad**	**Coal Mining**	**Steel Factory**

15. Make a key on your map using the pictures and make sure you have your name written on the map.

*****National Market---because of advertising and catalogs along with the use of mail and railroads many factories and mills were able to supply the entire United States with their goods and products.

Rise of Big Business ** Study Guide**

	CIVIL WAR

CIVIL WAR

BECAUSE--America went from a farming nation to a nation full of factories & businesses

- Machines could do the work faster and cheaper
  - ➢ **Less demand for workers on America's farms because of:**

  _M_____

  _

- *Natural Resources*- factories used:
  - _____
  - ➢ _____
  - ➢ _____
  and
  Timber (lumber)

	- Consumer goods are_____ bought by the average _____ - _____ _____-were created because of advertising and catalogs. - The use of _____allowed factories and mills to supply the entire United States with their goods and products. - _____ allowed manufactures to increase awareness of their products/goods - Consumers were able to shop by_____and _____ - Locations of factories were in what 2 regions? _____&_____ __
Inventions/ Inventors 	**Inventions made peoples lives easier** - It made industries more _____ - Who invented the telephone: _____ - Who invented the electric light bulb: _____ - His inventions made_____and _____ more useful in homes/factories - The telephone and the telegraph improved: _____

Leaders in Big Business	• Inventor that invented the automobile was: _____ • _____(increased production of automobiles) • _____ was the car that anyone could afford to buy (type of car) • TODAY-factories everywhere make products quickly by using the _____Line Who was the prominent steel company owner: • Andrew Carnegie was a philanthropist because he _____ money to charities. • Who was the industrialist associated with the shipping/railroads:_____ • Who was the industrialist associated with the oil industry:_____

More….. Big Business	• This city was most commonly known for it's meat packing industry _____. **(YOU learned this in the West Unit)**
	• What is the term for money invested in a business called: _____
	• Businessmen raised large amounts of money/capital to set up this type of company: _____ ___
	• What is it called when a company controlls the entire market and eliminates its competition: _____ (The Standard Oil Company elminated all aspects of oil production, transportation and the delivery of oil)

Word Bank
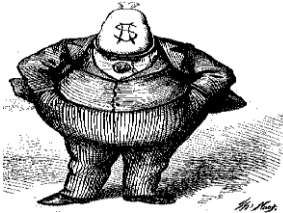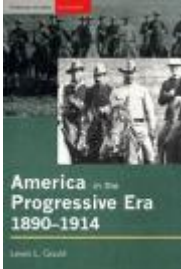
Henry Ford	J.D. Rockefeller	mechanization
agricultural	iron	advertising
assembly	corporation	Thomas Edison
assembly line	Alexander Graham Bell	
oil	capital	Industrial
Railroads	Model T	lighting
catalog	Andrew Carnegie	mail-order
Chicago	National Markets	products
Northeast	monopoly	Midwest efficient
electricity	person	communication
Cornelius Vanderbilt	donated	gold

Progressive Movement Study Guide

## WEB Dubois	Helped found the _____ (_____ _____ _____ _____) He believed that African Americans should have the opportunity to get an _____
## Booker T. Washington	Supported _____ training in order for African Americans to achieve _____ rights
## Segregation	• What was the name of the court case that made **"separate but equal"** *legal*: _____v._____ _____ • _____ was the nickname given to a set of racial laws that _____ African Americans from Whites in _____ places _____ _____ and _____gained better _____ opportunities during this time period

Jane Addams	• Jane Addams founded a settlement house known as the _____ _____
	• This house offered a wide range of _____t o meet the needs of poor immigrants
	These services included child care, job training, _____ _____, housing and education to improve immigrant's way of life.
Political Bosses	• Political machine leaders that controlled local jobs and services were known as _____
	• These _____ _____ provided social services and jobs in exchange for votes
	(These bosses would pretend to befriend immigrants in return they wanted the immigrants votes)
	• A famous corrupt political leader in New York was: _____ _____
Progressives/Working Conditions	• Progressives exposed _____ and offered solutions to the negative effects of _____
	• Which of the following were negative effects of industrialization? (CIRCLE all that apply)
	a. Child labor

	b. Safe working conditions **c.** Long hours **d.** Little pay • Workers joined _____ in order to shorten working hours, improve unsafe working conditions and to improve low wages
Strikes	• Labor _____ used _____ and _____to get better working conditions In the late 1800's, strikes occurred all the time, often ending in violence and little gain for the workers. In 1892, 13 men were killed in a battle between striking steelworkers and strikebreakers at Carnegie's steel plant in Pittsburgh. The strike turned many Americans against unions and organized labor, which they blamed for the violence. What was the name of this strike :_____
Child Labor	• Many factory owners used *Child Labor* because children could be _____ less than _____ *(Children often entered the work force at age eight or nine because parents needed their children's wages. They worked in coalmines, textile mills and other factories. Without safety regulations, children were three times more likely to hurt themselves than adults)*

Muckrakers 	• _____ informed the public about working conditions in factories and corruption in the government by _____ newspaper and magazine articles • Upton Sinclair was a famous muckraker. He wrote the novel "_____" . • This novel informed the public about the conditions of the _____ _____ industry
Teddy **Roosevelt**	• Teddy Roosevelt was known as the _____ President President Roosevelt believed in the _____ of natural _____
Women's Suffrage 	• Women gained the right to vote with passage of the _____ **Amendment** to the Constitution of the United States of America. *(this amendment granted women the right to vote)* • _____ ____. _____ was a suffragist who fought for women's right to vote *(she was the president of the NAWSA)*

Temperance Movement

No Alcohol

- _____ **Movement** - wanted to limit or ban the use of alcohol. Thought drinking was a serious threat to family life

- What amendment made it illegal to make, transport or sell alcohol in the United States:
  a. 16th amendment
  b. 17th amendment
  c. 18th amendment

❖ **Prohibition**- a period of time (1919-1933) when alcohol was actually made illegal by the 18th amendment

Amendments

- Matching

  13th

  14th

  15th

  18th

  19th

  21st

- gave citizenship to all people born in the United States and also gives them equal protection under law

-gave women the right the vote

-repealed the 18th amendment

-all citizens have the right to vote regardless of race or color
                              (voting rights)

-abolished/bans/ends slavery

-prohibited the making, sale and tansportaiton of alcohol illegal in the U.S.

Word Bank

segregated	women	corruption	Susan B. Anthony
bosses	educational	writing	vocational
medical care	19th	Plessy v. Ferguson	
The Jungle	resources	political machines	Unions Hull
House	equal	services	conservation

NAACP (National Association for the Advancement of Colored People)

protests	meat packing	strikes
public	Jim Crow Laws	Unions
Boss Tweed	adults	African Americans
Homestead Strike	industrialization	conservation
Temperance	Muckrakers paid	education

SPANISH-AMERICAN WAR STUDY GUIDE

ALASKA	• The United States bought Alaska from _____ • Was Alaska known as the "useless icebox" Yes/No
HAWAII	• Liliokalani was the _____ of Hawaii *She fought for "Hawaii for the Hawaiians"*
ISM'S Write the Definition	• **Isolationism**- • **Imperialism**- • **Yellow Journalism-**
TRUE OR FALSE Remember the Maine!	_____Before the war, Cubans lived under the rule of England _____Cubans had no desire to be independent _____The first action of the war took place in Havana Harbor in Cuba. _____The Rough Riders were a cavalry unit led by William McKinley _____The U.S. gained Guam, Puerto Rico and the Philippines as a result of the war. _____ The U.S. was seen as a weak nation after the war. _____The Spanish American War was called "A Splendid Little War" _____Fighting took place in both the Caribbean Sea and the Pacific Ocean _____Yellow journalists had no effect on spreading war fever in the U.S. _____George Dewey led the U.S. naval victory at Manila Bay in the Philippines. _____Queen Liliuokalani wanted to keep native control of the Hawaii islands

SPANISH-AMERICAN WAR	• Before the war, the people of Cuba had lived under the rule of _____
	 • What event led Congress to declare war on Spain _____
	 • The US got involved in the Spanish-American War because of all of the following EXCEPT which one?
	    a. **American businesses in Cuba**
	    b. **USS Maine sank in Havana Harbor**
	    c. **Panama Canal**
	    d. **Support for Cuban Independence**
	 • A rebellion in what country triggered the Spanish-American War_____
	 • The first naval battle of the Spanish-American War took place in _____
	 • The U.S. gained (territories) _____, _____, and _____ as a result of the war
	 • As a result of the war the U.S. emerges as a _____ _____

PANAMA CANAL	• Which 2 bodies of water did the Panama Canal connect _____ _____ and _____ _____ • Mosquitoes carried the deadly diseases of _____ _____ and _____ • *These (diseases) were some of the hazards that workers had to deal with when building the Panama Canal*
TEDDY ROOSEVELT 	• What was the name of the <u>cavalry regiment (unit)</u> led by Teddy Roosevelt_____ _____ • "_____ softly and carry a big _____" was a quote used by _____ _____ • Roosevelt's view-it was the _____ _____ responsibility to use control or act as the _____ police
IMPERIALIST OR ANTI-IMPERIALIST	1._____American farmers need to find new places to sell their food. America is too small. 2._____In order to make America's navy strong and function, the US must have island bases to supply the steam warships with coal. 3. _____To continue making money, American businesses must find markets in other lands to sell their goods. 4._____Taking other countries is not worth our sons dying in the battlefield.

Map Word
Bank

Philippines
Alaska
Hawaii
Guam
Cuba
Spain
Panama
France
Columbia

C

D

E

F

B

A - _____
B - _____
C - _____
D - _____
E - _____
F -
_____

Word Bank

Exaggerated news stories	Philippines	Spain
Russia	Rough Riders	U.S.S Maine
explosion	Yellow Fever	Atlantic Ocean
Philippines	Cuba	
taking over land to become a power nation		
Speak	Teddy Roosevelt	Stick
World's	Pacific Ocean	Malaria
United States	Puerto Rico	Queen
World Power	Guam	
noninvolvement in world affairs		

Jane Addams and Hull House

1. Jane went on a trip to the town of Freeport with her father. What types of things did she see?

2. List events in Jane's life:
    a. Mother died when Jane was _____ years old

    b. Got the disease _____ which deformed her
       _____.

    c. Went to the _____ Seminary where women were only
       allowed to study _____ and learn how to become graceful
       and efficient _____.

    d. Soon, though she was able to study subjects like _____,
       _____, _____, and
       _____.

    e. Jane did not want to get _____-- or be a teacher.

    f. She went to _____ school.

    g. Had _____ surgery.

    h. Her father _____ leaving her enough money.

    i. Traveled to _____.

    j.   Saw Toynbee Hall and how it helped London's _____ immigrants.

    k.   She was then determined to open a _____ house in Chicago.

3. Describe the living conditions in Chicago:

4. What did Jane Addams set in Hull House?

    a. _____ center for children

    b. _____ and boys club

    c. _____ shop

    d. Health Care

    e. Job Training

5. Besides living conditions, Jane Addams also worked against poor _____ conditions.

6. Not everyone agreed with her. Factory Owners, politicians, and even some _____ disagreed with her.

7. One company even _____ her with $50,000 if she would back down.

8. Besides living and working conditions Jane Addams also pushed for a juvenile court system. This was because the children were:

I improved immigrant life by setting up:

These _____ houses provided:

Making the Dirt Fly

John F. Stevens stood on deck as his ship edged to the dock at Colon (kuh LOAN),

Panama. It was a hot, sticky July day in 1905. Stevens had come to Panama to direct the

building of the Panama Canal. He was acting under orders from President Theodore

Roosevelt to "make the dirt fly."

From the moment Stevens arrived, he saw that there was more to his job than moving

dirt. As he stepped ashore, workers rushed up the gangplank past him. They were eager to

leave the country. Looking around, Stevens saw why. On the dock among the outgoing

freight were long wooden boxes — coffins. The Canal Zone had been hit by a disease

called yellow fever.

Stevens knew he had his work cut out for him. He also knew that the world would be

watching his ditch-digging task with interest. Once completed, the Panama Canal would

shorten the journey between the east and west coasts of North and South America. It

would save 8,000 miles (12,800 kilometers) on the ocean passage between New York and

San Francisco.

The Spanish-American War had made Americans aware of the problems of de fending

two coasts. During the war, the battleship Oregon had left California to join the fleet in

Cuba. Its progress was reported every day in the newspapers. In 68 days the Oregon raced around the tip of South America to Cuba. It was a new speed record. But wars could be won or lost in two months. Many Americans began calling for a shortcut across the continent by sea.

After the war the US had an even greater need for a shortcut. Puerto Rico, Hawaii, and the Philippines were now possessions of the United States. US defense posts stretched halfway around the world. Getting from one area to another became a problem.

Building a canal across Panama was not a new idea. A French company had attempted it in the 1880's. Panama was the narrowest stretch of land between the Atlantic and Pacific Oceans in the entire Western Hemisphere. But the engineering challenge was great. The French company ran out of money and gave up.

Bargaining with Colombia. President Roosevelt was eager for a canal across Panama, which was then part of the Republic of Colombia. U.S. Secretary of State John Hay worked out a treaty with Colombia in January 1903. Colombia agreed to sell a strip of land six miles wide to the US. The Canal Zone, as this land was called, would run from the Atlantic to the Pacific Ocean. It would be completely under US control.

But then Colombia's senate stalled. Many Colombians opposed the treaty because it gave away control of their land. Meanwhile many Panamanians were unhappy under Colombian rule. In November 1903 some of them rebelled. President Roosevelt was furious at Colombia for stalling. U.S. troops were landed in Panama to aid the rebels.

Their revolution was successful. Then the U.S. quickly signed a treaty with the new Republic of Panama.

The actual building of the canal began in 1904. There were many problems. Panama was a tropical country. The heat was smothering. Worst of all was the dreaded yellow fever. Yellow fever had been a killer in the Spanish-American War. Dr. Walter Reed had discovered that it was carried by certain mosquitoes. His assistant in Cuba was Dr. William Gorgas. Now Gorgas came to Panama to wipe out yellow fever.

Gorgas' plan was to get rid of the mosquitoes that caused the disease. Mosquitoes bred mostly in swamps and still water. Gorgas decided on a complete clean-up program. He was given a team of workers to perform this job. The men drained swamps. They hunted down water containers, then junked and burned them. They moved workers from their homes. Then they sealed up the cracks, cleaned out dirt, and sprayed the houses with great care. Gorgas was successful. Slowly yellow fever was overcome. It took about a year to make the Canal Zone safe from the disease. But once it was safe, workers were eager to work on the canal.

Planning the canal. Now Stevens turned his attention to the plan for the canal. One plan was to dig a big ditch at sea level from the Atlantic Ocean to the Pacific. Another plan was to use locks along with the sea level ditch. Locks are devices for raising and lowering ships. They use pumps and gates to change the level of the water.

Stevens decided to build locks in the canal. He could make use of a major river — the Chagres (CHAHG-rays). He would build a dam in the river to make a large lake in the hills. This would make the overall route shorter. In 1906 Stevens went to Washington to present his plan to Congress. His ideas were accepted. But Stevens was tired from the hard work. He resigned his position. Colonel George W. Goethals (GOH thahlz) replaced Stevens in Panama. At first the workers were afraid of Goethals. They thought he would make them obey Army rules. But Goethals proved to be a good administrator. He took part of each day to listen to workers' complaints. He showed an ability to organize that won their respect.

Goethals was also a brilliant engineer. And he needed all his genius to handle the many problems in building the canal. The most frequent problem was landslides. Digging at the base of the hills caused dirt from the top to slide into the ditch. Building the locks was also a difficult job. Concrete was poured. Millions of tons of dirt were moved. At last, on April 1, 1914, canal workers carefully guided an old boat from the Atlantic Ocean to the Pacific. The canal system worked.

Canal workers practiced with larger ships in the weeks ahead. Then on August 15, 1914, the Panama Canal was officially opened to traffic. The opening ceremonies were brief. World War I had just started in Europe. The Panama Canal became an important part of America's defenses in that war. And it remains one of the greatest engineering jobs of all time.

Making the Dirt Fly

John F. Stevens stood on deck as his ship edged to the dock at Colon (kuh LOAN),
Panama. It was a hot, sticky _____ in 1905. Stevens had come to _____ to direct the
building of the _____ Canal. He was acting under orders from President Theodore
_____ to "make the dirt fly."

From the moment Stevens arrived, he saw that there was more to his job than moving
dirt. As he stepped ashore, workers rushed up the gangplank past him. They were eager to
leave the country. Looking around, Stevens saw why. On the dock among the outgoing
freight were long _____ _____ or coffins. The Canal Zone had been hit by a disease
called _____ _____.

Stevens knew he had his work cut out for him. He also knew that the _____ would
be watching his ditch-digging task with interest. Once completed, the Panama Canal
would _____ the journey between the east and west _____ of North and South
America. It would save _____miles (12,800 kilometers) on the ocean passage between
New York and San Francisco.

The Spanish-American War had made Americans aware of the problems of defending
two coasts. During the war, the _____ _____ had left California to join the fleet in
Cuba. Its _____ was reported every day in the newspapers. In _____ days the Oregon

raced around the _____ of South America to _____. It was a new speed record. But

wars could be won or lost in _____ _____. Many Americans began calling for a

_____ across the continent by sea.

After the war the US had an even greater need for a shortcut. _____ _____,

_____, and the Philippines were now possessions of the United States. US defense

posts stretched halfway around the world. Getting from ____ area to _____ became

a problem.

Building a _____ across Panama was not a new idea. A French company had _____

it in the 1880's. Panama was the _____ stretch of land between the Atlantic and

Pacific _____ in the entire Western Hemisphere. But the _____ challenge was

great. The French company ran out of _____ and gave up.

Bargaining with Colombia. President Roosevelt was eager for a canal across Panama,

which was then part of the Republic of _____. U.S. Secretary of State John Hay

worked out a _____ with Colombia in January 1903. _____ agreed to sell a

strip of land six miles wide to the US. The Canal _____, as this land was called,

would run from the _____ to the _____ Ocean. It would be completely under

US control.

But then Colombia's senate stalled. Many Colombians _____ the treaty because it

gave away _____ of their land. Meanwhile many _____ were unhappy

under _____ rule. In November 1903 some of them rebelled. President Roosevelt

was furious at Colombia for stalling. U.S. troops were _____ in Panama to aid the rebels. Their revolution was successful. Then the U.S. quickly signed a treaty with the new Republic of Panama.

The actual building of the canal began in _____. There were many problems. Panama was a tropical country. The _____ was smothering. Worst of all was the dreaded _____ fever. Yellow fever had been a killer in the Spanish-American War. Dr. Walter Reed had discovered that it was carried by certain _____. His assistant in Cuba was Dr. William _____. Now Gorgas came to Panama to _____ ____ yellow fever.

Gorgas' plan was to get ____ of the _____ that caused the disease. Mosquitoes bred mostly in swamps and still water. Gorgas decided on a complete _____-___ program. He was given a team of workers to perform this job. The men _____ swamps. They hunted down water containers, then junked and burned them. They moved workers from their homes. Then they sealed up the _____, cleaned out ____, and sprayed the houses with great care. Gorgas was successful. _____ Yellow fever was overcome. It took about a year to make the Canal Zone _____ from the disease. But once it was safe, workers were _____ to work on the canal.

Planning the canal. Now Stevens turned his attention to the plan for the canal. One plan was to _____ a ___ ___ at sea level from the _____ Ocean to the Pacific. Another plan was to use ____ along with the sea level ditch. Locks are _____ for raising and lowering ships. They use _____ and gates to change the level of the water.

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Goethals was also a brilliant _____. And he needed all his genius to handle the many _____ in building the canal. The most frequent problem was _____. Digging at the base of the hills caused dirt from the top to slide into the ditch. Building the locks was also a difficult job. _____ was poured. _____ of tons of dirt were moved. At last, on April 1, 1914, canal workers carefully guided an old boat from the Atlantic Ocean to the Pacific. The canal system worked.

Canal workers practiced with larger ships in the weeks ahead. Then on August 1_, 1914, the Panama Canal was officially opened to _____. The opening ceremonies were brief. World War I had just started in _____. The Panama Canal became an important part of America's defenses in that war. And it remains one of the greatest engineering jobs of all time.

Student Survey

Name _____Teacher _____Period _____

Directions:
  1. Circle the face that best describes your opinion.
  2. Answer each question to the best of your ability.

Agree = ☺, Undecided = 😐, Disagree = ☹

1. I liked social studies in elementary school.

☺   😐   ☹

2. I like social studies this year.

☺   😐   ☹

3. If you like social studies this year, describe here what you like about it.

_____
_____

4. If you do not like social studies this year, describe here what you do not like about it.

_____
_____

5. What activities help make learning social studies easier for you to learn?

_____
_____

6. I study before tests.

☺   😐   ☹

7. If you study before tests, what do you do?

_____

_____

8. What activities help you memorize history facts?

_____

_____

9. I liked using the mnemonic cards.

☺   😐   ☹

10. The mnemonic cards were easy to use.

☺   😐   ☹

11. The mnemonic cards helped me learn the history content.

☺   😐   ☹

12. The mnemonic cards helped me do better on my history tests.

☺   😐   ☹

13. I remembered the keyword and pictures on the cards when taking my history
    tests.

☺   😐   ☹

14. Similar mnemonic cards could be used in other classes.

☺   😐   ☹

15. If you think similar mnemonic cards could be in other classes, list which classes.
    _____.

16. Describe what you liked best about using the mnemonic cards.
    _____
    _____

17. Describe what you liked least about using the mnemonic cards.
    _____
    _____

Student Survey

Name _____Teacher _____Period _____

Directions:
  1. Circle the face that best describes your opinion.
  2. Answer each question to the best of your ability.

Agree = ☺, Undecided = 😐, Disagree = ☹

  1. I liked social studies in elementary school.

☺   😐   ☹

  2. I like social studies this year.

☺   😐   ☹

  3. If you like social studies this year, describe here what you like about it.

  _____
  _____

  4. If you do not like social studies this year, describe here what you do not like about it.

  _____
  _____

  5. What activities help make learning social studies easier for you to learn?

  _____
  _____

6. I study before tests.

☺   ☺   ☹

7. If you study before tests, what do you do?

_____
_____

8. What activities help you memorize history facts?

_____
_____

Teacher Survey

Teacher Name _____

1 = Strongly agree   2 = Agree   3 = Undecided   4 = Disagree   5 = Strongly disagree

Using the scale of 1 to 5, circle the answer you feel best fits your opinion and observations.

1. Mnemonics helped me improve content instruction

      1   2   3   4   5

2. I would like to use mnemonics in the suture.

      1   2   3   4   5

3. Compared with traditional instruction with terms and definitions, mnemonics is better for teaching specific events, people, or vocabulary.

      1   2   3   4   5

4. Compared with mnemonic instruction with terms and definitions, traditional instruction is better for teaching specific events, people, or vocabulary.

      1   2   3   4   5

5. Students were on task when using the mnemonic cards.

      1   2   3   4   5

6. Students were actively engaged when using the mnemonic cards.

      1   2   3   4   5

7. Which type of instruction did you prefer for teaching targeted factual information, mnemonic cards or traditional instruction? (Circle 1) Tell why.

_____
_____
_____

8. Which type of instruction seemed easier for the delivery of specific factual information, mnemonic cards or traditional instruction? (Circle 1) Explain why.

_____
_____
_____

9. What did you enjoy most about teaching with mnemonics?

_____
_____
_____

10. What did you enjoy least about teaching with mnemonics?

_____
_____
_____

11. What did you students think about using the mnemonic cards?

_____
_____
_____

12. According to your perception of class performance, did you students appear to recall more facts with the mnemonic cards or with traditional instruction? (Circle 1) Explain why.

_____
_____
_____

13. What did you enjoy best in general about using traditional instruction?

_____
_____
_____

14. What did you enjoy best in general about using the mnemonic cards?

    _____
    _____
    _____

15. Write any other comments that you think would beneficial to know about using the mnemonic cards or designing social studies instruction in general,

Appendix II

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Appendix JJ

If you like social studies this year, describe here what you like about it.

0 = No Answer
1 = Mnemonics
2 = Teacher
3 = Topic
4 = Fun
5 = Simulation
6 = Not boring
7 = Atmosphere
8 = Activities
9 = Projects
10 = Not much homework
11 = Not a lot of dates to remember
12 = Not to many notes to write
13 = Not hard
14 = Easy
15 = Games
16 = Friends are in the class
20 = Generic
21 = Don't Know
22 = Negative

If you do not like social studies this year, describe here what you do not like about it.

0 = No Answer
1 = Tests and quizzes are hard
2 = Too few Projects
3 = Confusing
4 = Copy too many notes
5 = Too much work
6 = Harder than last year
7 = Don't like the topic
8 = Too many names and dates
9 = Don't care about social studies
10 = Boring
20 = Generic
21 = Don't Know

What activities help make learning social studies easier for you to learn?
0 = No Answer
1 = Study guide
2 = Mnemonics
3 = Reviewing
4 = Games
5 = Hands on
6 = Notes
7 = Going over answers
8 = Simulations
9 = Movies
10 = Anything fun
11 = Not having to write a lot of notes
12 = Notes on overhead
13 = Working on computers
15 = Flash Cards
20 = Generic
21 = Don't Know
22 = Negative

If you study before tests, what do you do?
0 = No answer
1 = Read study guide
2 = Parent quizzes me
3 = Review classwork
4 = Don't study
5 = Index cards
6 = Quiz myself
20 = Generic

What activities help you memorize history facts?
0 = No Answer
1 = Flash Cards
2 = Read Study Guides
3 = Games
4 = Read Class Notes
5 = Read over and Over
6 = Stare
7 = Hands-on
8 = Doing class activities
9 = Fun activities
10 = Movies

11 = Mnemonic cards
12 = Word-up
13 = Quiz Myself
14 = Songs
15 = Projects
20 = Generic
21 = Don't know
22 = Negative

If you think similar mnemonic cards could be in other classes, list which classes.
0 = No Answer
1 = English
2 = Math
3 = Science
4 = Health
5 = Music
6 = No class
20 = Generic
21 = Negative

Describe what you liked best about using the mnemonic cards.
0 = No Answer
1 = Keyword/Picture
2 = Hearing the Definition Read
3 = Working with a Partner
4 = Easy to use
5 = The questions
6 = Doing them over and over
7 = Helps me to remember
20 = Generic
21 = Don't Know
22 = Negative

Describe what you liked least about using the mnemonic cards.
0 = No Answer
1 = Listening to Teacher Directions over and Over
2 = Long Scripts
3 = Answers on front
4 = Doing them over and over
5 = Some of the pictures
6 = Didn't remember some
7 = Nothing
8 = Keywords
9 = Boring
10 = Taking out of the envelope
11 = Second person knew the answers
12 = Too many cards
13 = My partner
14 = Record sheet
15 = Everything
16 = Hard Questions
20 = Generic
21 = Don't Know
22 = Negative

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